HISTORY OF THE UNITED STATES SUPPORT ACTIVITIES GROUP

15 February - 31 March 1973

by
MSgt Frank M. Whitacre
Historian

Approved By:

JOHN W. VOST, JR., General, USAF
Commander
The Reproduction Branch

(U) This branch was originally planned to be combined with the 56th CSGp base reproduction facility; however, a later study of facilities revealed a floor shortage if both facilities were to be combined. Also, local nationals were employed by the base reproduction facility, and therefore reproduction of classified material could not be accomplished except at scheduled times. On 22 February 1973 the decision was made to set up the USSAG Reproduction Branch in room 22, USSAG Headquarters. The following equipment was on hand at the time: Two 2650 Printing Presses; one 50-bin Collator; and one 4-drawer safe to store classified material. This equipment was moved and set up for operation on 24 February 1973. The 805 Master Imager and Brunning 2000 copier were received on 26 March 1973.31

Correspondence Processing Branch

(U) A one-point centralized distribution system was established for Hq USSAG. Distribution was made to the Administrative Services Division twice daily at 1030 and 1530 hours by the 56th CSGp/DA. Each agency serviced by this division appointed one primary and at least one alternate individual to receive and deliver accountable/unaccountable distribution for their agency. Under the one-point centralized system all accountable/unaccountable distribution to include Armed Forces Courier material was controlled. Major Alba was appointed as the headquarters Top Secret Control Officer.
CONTENTS

FOREWORD .................................................. 1x

I. ORGANIZATION AND RESOURCES ............................. 1

Establishment .............................................. 1
Resources .................................................... 10
Out-of-Country Rest and Recuperation Program .......... 11
Joint Service Commendation Medal ......................... 12
Dual-Hat Functions ......................................... 12
In-Country Strength Accounting ........................... 13
Joint Tables of Distribution ................................ 14
JCRC Support ................................................ 14
Safe Haven/Handclasp ....................................... 16
Tax Exclusion and Combat Zone Mailing ................ 17
Hq Operating Instructions (HOI's) ......................... 18
Quality Control Section .................................... 18
Officer Effectiveness Report (OER)/Airman Performance Report (APR) Unit ....................... 19
Officer and Airmen Manning Unit ......................... 19
Officer and Airman Assignment Unit ...................... 19
Awards and Decorations Unit .............................. 20
Records, Processing and Security Unit ................... 20
Army Personnel Representatives ......................... 20
Navy Personnel Representatives ......................... 21
Administrative Services Division ......................... 21
   Establishment ............................................. 21
   The Reproduction Branch ................................ 23
   Correspondence Processing Branch ..................... 23
   Administrative Branch ................................... 24
Office of Information ...................................... 25
   Activities/Operations .................................... 25
   Current Projects ......................................... 25
USSAG/7AF Title ............................................ 26
USSAG/7AF Inspector General Billet ....................... 26
Redistribution of 7/13AF Headquarters Manpower ................... 27
   Authorizations ......................................... 27

FOOTNOTES .................................................. 28

II. INTELLIGENCE ............................................. 31

Collections Division (INC) ................................ 33
Human Intelligence (HUMINT) Section .................... 36
Support Division (IND) ..................................... 38
Operational Intelligence Division (INO) .................... 40

(This page is unclassified)
IV. LOGISTICS ................................................. 92
    Logistics Management Division Activities .......... 93
    Plans and Programs Division .......................... 94
    Proposed Changes to USSAG J-4 JTD .................. 95
    RU-21 Support for JCRC .............................. 96
    Transportation Division, J-4, Principal Functions 96
    and Activities ......................................
    RVNAF Sea Transportation Requirements After 97
    U.S. Military Redeployment ...........................
    RVNAF Airlift Capabilities After U.S. Military 98
    Redeployment ....................................... 98
    Engineer Division, J-4, Principal Functions and
    Activities ......................................... 99

FOOTNOTES .................................................. 100

V. COMMUNICATIONS-ELECTRONICS ........................... 101
    USSAG HQ's ............................................ 101
    Communications-Electronics Annex to USSAG 102
    Operations Plan ......................................
    JCRC Communications Support ........................ 102
    Satellite Terminal (AN/TSC-54) Operations ......... 103
    Blue Chip Communications ............................. 104
    SACADVON Communications ............................ 104

FOOTNOTES .................................................. 106

VI. JOINT CASUALTY RESOLUTION CENTER .................. 107
    Organization ........................................... 107
    Mission ............................................... 108
    Functions ............................................ 110
    CINCPAC Briefed ...................................... 114
    Administrative Division .............................. 115
    Casualty Data Division ................................ 117
    Operation Homecoming ................................ 117
    Organizational Change ............................... 119
    Operations ........................................... 120
    Automatic Data Processing ............................ 121
    Public Affairs ....................................... 123
    Staff Judge Advocate ................................ 124
    Comptroller .......................................... 124
    Field Elements ....................................... 124
    CIL/THAI .............................................. 125
    Distinguished Visitors Briefings ..................... 125

FOOTNOTES .................................................. 127

(This page is unclassified)
VII. HEADQUARTERS COMMANDANT ............................... 130
   Organization ................................................. 130
   Funding ...................................................... 132
FOOTNOTES .......................................................... 134
GLOSSARY ............................................................. 135

ANNEX (History, Defense Attache Office/Saigon)
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roster of Key Personnel as of 31 Mar 73</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hq USSAG/7AF Organizational Chart</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>USSAG J-3/Intelligence Organizational Chart</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Significant BDA (15 Feb - 31 Mar)</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>USSAG Manning Chart</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Force Locations</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Available Resources</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Strike Support Sorties</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Radar Control Sites</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>SEA Tactical Data System</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>SEA Tac Data System Interface</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Command and Control</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Blue Chip</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Extensions of Command and Control</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>ABCCC Orbit</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Electronic Sensing Measures</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Teaball Weapons Control Center</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Teaball Control Elements</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Sortie Log (16 Feb)</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Sortie Log (21 Feb)</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Sortie Log (23 Feb)</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Sortie Log (12 Mar)</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Sortie Log (31 Mar)</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Crash Sites</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>JCRC Functional Chart</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>CR Field Team</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>JCRC JTD</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>JCRC Initial Organizational Chart</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>JCRC Current Organizational Chart</td>
<td>116</td>
<td></td>
</tr>
</tbody>
</table>

(This page is unclassified)
GEN. JOHN W. VOGT, JR.

COMMANDER, USSAG/7AF
USSAG/7AF
COMMAND AND STAFF


On 26 October 1972, Presidential Aide Dr. Henry Kissinger stated that "Peace is at Hand." The following day the Joint Chiefs of Staff provided planning guidance that was to result in the inactivation of the United States Military Assistance Command -- a long established Joint Military organization in the Republic of Vietnam -- and the activation of the United States Support Activities Group in Thailand.

In this, the first historical summary of the new organization, the Historian has attempted to record the chain of events from the planning evolution through the first Forty-Five days of actual operation.

Grateful appreciation is conveyed to all Staff Agencies for their generous contribution of time and material in the preparation of this history. A note of special appreciation is also extended to Staff Sergeant Kenneth J. Buck for his indefatigable typing of the manuscript, and to Lt. Col. B. R. King, Secretary of the Joint Staff, for his enthusiastic editing assistance. Inadequacies in the extent of coverage are solely the author's, mitigated somewhat by the time allotted for final preparation.

May 1973

FMW
ROSTER OF KEY PERSONNEL AS OF 31 MARCH 1973

Commander
   JOHN W. VOGT JR., General, USAF
Deputy Commander
   HOWARD H. COOKSEY, Maj. Gen., USA
Chief of Staff
   CARLOS M. TALBOTT, Maj. Gen., USAF
Asst C/S, Intelligence
   EUGENE L. HUDSON, Maj. Gen., USAF
Asst C/S, Operations
   JACK BELLAMY, Brig. Gen., USAF
Asst C/S, Logistics
   STAN L. McCLELLAN, Brig. Gen., USA
Asst C/S, Personnel
   THOMAS U. HARROLD, Colonel, USA
Asst C/S, Comm-Elect
   TELFORD S. EGGLESTON, Colonel, USAF
Chief, Fleet Coord Group
   OWEN H. OBERG, Rear ADM, USN
Chief, SAC Advon
   EDWARD F. GEHRKE, Colonel, USAF
Commander, JCRC
   ROBERT C. KINGSTON, Brig. Gen., USA
Chief, TACLO
   WILBUR L. CARPENTER, Colonel, USAF
Headquarters Commandant
   IAN D. ROTHWELL, Colonel, USAF
Secretary, Joint Staff
   B. R. KING, Lt. Col., USAF
Chief, Information
   DONALD J. PETERSON, Lt. Col., USAF

Figure 1

(This page is unclassified)
Col. Thomas U. Harrold, U.S. Army arrived at NKP on 13 February to assume his duties as USSAG/7AF Assistant Chief of Staff, J-1. The Deputy Assistant Chief of Staff, J-1, Col. Cola R. Morris Jr., USAF, arrived on 10 February 1973.

The J-1 Plans and Programs Division was authorized five officers and two enlisted personnel. Upon activation of USSAG/7AF on 10 February, Lt. Col. Walter K. Hennigan, USAF, was acting Division Chief; Major Richard E. Kulesa, USAF, was the Personnel Plans Officer; and Major John Dompe, USA, was in charge of the Bangkok Safe Haven Detachment. On 5 March, Major Gene A. Teany, USA, arrived and assumed duties as a Personnel Staff Officer. Lt. Col. Welda A. Smith, USAF, arrived from Vietnam to assume duty as Division Chief on 28 March 1973. At that time Lt. Col. Hennigan, who was serving as acting Division Chief, filled the last personnel staff officer position and the division was 100 percent manned.

Out-of-Country Rest and Recuperation Program

On 6 March 1973, the JCS authorized CINCPAC to continue the SEA out-of-country Rest and Recuperation (R&R) Program for a limited period of time, and USSAG was tasked to be the monitoring headquarters. The purpose of the program was to provide an R&R opportunity for those personnel remaining in SEA who had accrued eligibility but were unable to participate in R&R because of the RVN cease-fire. Personnel who completed a minimum of 90 days service in Vietnam or Cambodia prior to 28 March 1973, and personnel who qualified for hostile-fire pay for 90 consecutive days in
Thailand prior to 28 March were eligible provided they were scheduled to complete three additional months on a normal tour in SEA.

Passengers were authorized to travel via flights departing both Bangkok and Saigon for Honolulu, and all travel associated with the program was to be completed by 28 June 1973. The first R&R passenger departed Bangkok on 18 March and by 31 March 1973 a total of 157 personnel had participated in the program.11

**Joint Service Commendation Medal**

(U) On 15 February 1973, COMUSMACV dispatched a message to CINCPAC requesting that authority for award of the Joint Service Commendation Medal be delegated to COMUSSAG for awards to military personnel assigned to this headquarters and to those joint agencies and activities reporting through this command. On 16 February 1973 CINCPAC dispatched a message which granted the authority in accordance with paragraph 3, CINCPACINST 1650.4c.12

(U) On 7 March, USDAO Saigon, dispatched a message to COMUSSAG requesting that authority for award of the Joint Service Commendation Medal be delegated to the Defense Attache, Saigon, for military personnel assigned to his office. The Chief of Staff, Headquarters USSAG, disapproved the request, and a message was dispatched from COMUSSAG to USDAO announcing the disapproval. The message went on to state that all awards of the Joint Service Commendation Medal to military personnel assigned to USDAO would be approved by COMUSSAG.13

**Dual-Hat Functions**

(U) With the activation of USSAG/7AF at NKP, the majority of...
personnel functions that had been performed by 7AF at Tan Son Nhut Air Base, RVN, were being channeled to NKPP for action. These were primarily those actions that required COMUSSAG's signature in his dual-hat capacity as Commander, 7th Air Force. Of major importance in this area was the responsibility for monitoring Thailand assignments for senior officers who occupy command and operational positions. Other 7th AF residual actions involved processing of Officer Effectiveness Reports (OERs), individual and unit awards, and the re-establishment of policies and procedures necessary for continuity of operation. 14

In-Country Strength Accounting

(U) Procedures were developed for in-country strength accounting and reporting as required by Military Assistance Command, Thailand (MACTHAI) for USSAG and those organizations which are serviced by USSAG. Military strength reporting would be required, by component, on a weekly basis, with an expanded report submitted at the end of each month. The following tabulation reflects the report submitted as of 31 March 1973: 15

<table>
<thead>
<tr>
<th></th>
<th>AUTHORIZED</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFF</td>
<td>ENL</td>
<td>OFF</td>
</tr>
<tr>
<td>Army</td>
<td>44</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>Navy</td>
<td>11</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Marines</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Air Force</td>
<td>237</td>
<td>238</td>
<td>210</td>
</tr>
<tr>
<td>Totals</td>
<td>294</td>
<td>294</td>
<td>263</td>
</tr>
</tbody>
</table>

(This page is unclassified)
### Joint Tables of Distribution

(U) On 20 March 1973, the first major revision to the J-1 portion of the JTD was submitted to J-3/Surface Operations and Plans Division (DOS). This involved an internal reorganization from two to three divisions with no increase in total authorizations. The initial JTD was developed at MACV without the benefit of knowledge of exact workloads or functional lines. The new structure reflects proper division of responsibilities.

### JCRC Support

(U) In March 1973, J-1 assumed responsibility for personnel

---

**JCRC**

<table>
<thead>
<tr>
<th></th>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFF</td>
<td>ENL</td>
</tr>
<tr>
<td>Army</td>
<td>31</td>
<td>75</td>
</tr>
<tr>
<td>Navy</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Marines</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Air Force</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>56</td>
<td>96</td>
</tr>
</tbody>
</table>

**FLT COORD GP**

<table>
<thead>
<tr>
<th></th>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFF</td>
<td>ENL</td>
</tr>
<tr>
<td>Navy</td>
<td>11</td>
<td>25</td>
</tr>
</tbody>
</table>

**TAC LIAISON**

<table>
<thead>
<tr>
<th></th>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFF</td>
<td>ENL</td>
</tr>
<tr>
<td>Air Force</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
and administrative support of the JCRC, on the same basis as that provided to USSAG assigned personnel. The JCRC was authorized three military spaces for organic personnel support. This was insufficient to meet their needs; therefore, an agreement was made to have the three NCOs who were assigned against these spaces perform duty with J-1. While not all inclusive, the following were the significant areas of support provided.

--Personnel Records - These were to be handled by J-1/Military Personnel Division (DPM) in the same manner as for personnel assigned to USSAG.

--In/Out Processing - JCRC duty sections would provide escort/sponsor for incoming personnel. Processing would be accomplished in the same manner as for other assigned USSAG personnel.

--Replacement Requisitions - J-1/DPM would requisition Army and Air Force replacements. JCRC would be responsible for providing J-1/DPM with information concerning out of cycle requirements.

--Strength Reporting - Sign-In/Out registers would be maintained by JCRC. Strength figures would be provided the Personnel Plans and Programs Division (DPP) in formats as required to satisfy USSAG strength reporting responsibilities.

--Casualty Reporting - JCRC would be responsible for providing J-1/DPM with immediate and required data. J-1/DPM would be responsible for satisfying component service requirements.

--Emergency Leave - This would be accomplished in the same manner as for component services within USSAG.

--Awards/Decorations - Recommendations for awards would be:
prepared by JCRC and processed through USSAG for appropriate action.

--Effectiveness Reports - J-I/DPM would establish necessary controls to insure timely submission of officer and enlisted effectiveness reports. It would be the responsibility of the JCRC to keep DPM informed of any status changes which could necessitate the submission of an effectiveness report.

--Administration - J-I/Administrative Services Division (DPA) provided JCRC printing and reproduction support. No additional administrative support was anticipated.

--Civilian Personnel - These actions would be the responsibility of JCRC.

Safe Haven/Handclasp

(U) In December 1966, JCS approved construction of 100 units of family quarters at Clark AB, Republic of the Philippines for families of selected key officers assigned to COMUSMACV for extended tours in RVN. The MACV plan for tour extension for selected key MACV officers established the rules of the Safe Haven Program for General/Flag officers and O6's in key positions at the director level. The Department of the Army (DA) later extended the Clark AB housing option to Province Senior Advisors (PSAs) and District Senior Advisors (DSAs) serving 18 month tours. Authority also was granted by SECDEF Memo to lease six quarters in Bangkok for key officers selected by COMUSMACV and serving an extended tour in RVN of at least 18 months. DA also authorized PSAs and DSAs to reside on the economy in Bangkok and draw station allowance, provided the number did not exceed 35 families. An attempt to expand the number of leased
quarters was disapproved by JCS in July 1972. In December 1967, JCS approved unaccompanied travel of wives of senior military officers in RVN between Safe Haven and Saigon. In July 1971, JCS approved accompanied travel on military aircraft from Saigon to sponsor’s duty station in RVN for wives only, when approved by COMUSMACV.

(U) On 23 March 1973, JCS granted COMUSSAG authority to continue the Safe Haven travel program for dependents of sponsors who were stationed in RVN or Thailand under the same parameters and authority previously granted to COMUSMACV. On 27 March 1973, JCS granted approval to continue the lease of six sets of quarters in Bangkok for key officers selected by COMUSSAG. As of 31 March 1973 COMUSSAG and DEPCOMUSSAG had dependents in Bangkok under the Safe Haven authority granted to COMUSSAG. The Assistant Chief of Staff J-4 was given approval to move his family to Bangkok in April 1973 and the Commander, JCRC in May 1973.

Tax Exclusion and Combat Zone Mailing

Executive Order 11216 designated Vietnam and adjacent waters as a combat zone and entitled military personnel serving in this area to a combat zone tax exclusion. Executive Order 11255 designated Vietnam and adjacent waters as an overseas combat zone for purposes of Armed Forces mailing privileges. In response to a query from JCS and CINCPAC concerning revoking these Executive Orders, COMUSSAG advised CINCPAC on 22 March 1973 that it was premature to revoke the Executive Orders because of continuing ceasefire violations in Vietnam; the Laos and Cambodia operations; and
the continuance of combat missions in SEA. Based on inputs from USSAG and DAO, Saigon, CINCPAC recommended to JCS that Executive Order 11255 (mailing privileges) be revoked and that Executive Order 11216 (tax exclusion) remain in effect until disestablishment of the existing DAO Saigon structure and/or USSAG, whichever occurred later.\footnote{18}

Hq Operating Instructions (HOI's)

(U) Upon activation of USSAG on 10 February 1973, there was a requirement to promulgate USSAG policy in several areas for which DPP was responsible. Accordingly, HOI 35-10, Uniform and Appearance, US Military Personnel was published on 26 February 1973 to prescribe the policy for wear of the uniform and insignia and appearance standards for Headquarters USSAG personnel. On 12 March 1973, HOI 177-373, Personnel Absences, Ordinary Leave Policy, was published. This HOI prescribed the ordinary leave policy for USSAG.\footnote{19}

Quality Control Section

(U) This section immediately identified all enlisted personnel who required Weighted Airman Promotion System (WAPS) testing and coordinated each action with the 56th Combat Support Group, Testing Office, and insured each member of USSAG and JCRC was tested within the time frame established by Hq USAF. All personnel currently in On-the-Job-Training (OJT) have been identified and are progressing in the OJT program. All officer and airmen promotion
rosters were screened and all personnel pending promotion were identified. This unit was fully operational on 15 March 1973.

**Officer Effectiveness Report (OER)/Airman Performance Report (APR) Unit**

(U) Immediately upon arrival at NKP this unit was responsible for processing over 125 OER/APRs that were closed out in Vietnam. This was an unexpected workload and through long hours of work all actions have been completed. All procedures within USSAG and JCRC have been established and this unit was fully operational on 15 March 1973.

**Officer and Airmen Manning Unit**

(U) This unit was responsible for lining up the JTD's for USSAG and JCRC. This project required many hours of overtime and the submission of 317 requisitions to Hq USAF. Many requisitions were submitted with reporting dates "earliest possible date." This was due to many officers returning to the Continental United States (CONUS) instead of coming to NKP from Saigon. This unit had all replacements requisitioned and was fully operational on 15 March 1973.

**Officer and Airmen Assignment Unit**

(U) This unit was responsible for establishing the port call procedures with the 56th Combat Support Group (CSGp), Transportation Office, for all personnel departing for CONUS. Due to the loss of the NCOIC to CONUS, this section was not fully operational until 25 March 1973. As of 31 March 1973, this unit was working on...
reassignment actions for personnel departing during the months of June, July, August and September 1973. 23

Awards and Decorations Unit

(U) This unit was not established at Hq USSAG until 28 March 1973. The Air Force Advisory Group was the responsible agency for all decorations until their deactivation on 28 March 1973. This unit was to be fully operational by 30 April 1973. 24

Records, Processing and Security Unit

(U) This section was responsible for creating and maintaining mobility folders on personnel assigned within this organization. All personnel arriving or departing this organization were processed through this section. Liaison and procedures were established with the base Finance Office and Consolidated Base Personnel Office for processing and supporting USSAG/JCRC personnel. This section was given an added responsibility of insuring each new member arriving at this organization had the necessary security documents required for completion of in-processing. There was a total of 700 members processed during the week of 15-22 February 1973. This unit was fully operational on 15 March 1973. 25

Army Personnel Representatives

(U) Immediately upon arrival from Vietnam on 10 February 1973, the Army representative established liaison with Headquarters, United States Army Support, Thailand (USARSUPTHAI), Sattahip, Thailand, for handling Army personnel matters. Two enlisted personnel
from USARSUPTHAI were sent on Temporary Duty (TDY) for six weeks to NKP to augment the in-processing of incoming Army personnel.

Against 88 Army personnel authorized in USSAG, 100 percent manning was reached on 31 March 1973. 26

Navy Personnel Representative

(U) The Navy personnel representative arrived at NKP on 10 February 1973 and established liaison with Chief of Naval Personnel and with the Commanding Officer, Naval Station, Subic Bay, Philippine Islands, for administrative support of Naval personnel. The Naval group had 27 personnel authorized and assigned for 100 percent manning as of 31 March 1973. 27

Administrative Services Division

(U) Major Michael S. Alba, Chief Administrative Services Division arrived at NKP 10 February 1973 with 6 of the 13 authorized personnel to establish the Administrative Services Division. Six of the seven remaining personnel to be assigned to the Administrative Services Division arrived over the next two-week period with the last individual of the six arriving 25 February 1973. SMSgt William T. Kennison, Assistant Chief, Administrative Services Division arrived on 28 March 1973. 28

Establishment

(U) Basic organizational structure and personnel assignments were determined prior to arrival at NKP. Detailed planning of functional responsibilities/support to be provided by this
division plus acquisition of specialized equipment and supplies was also accomplished prior to arrival at NKP. The first task to be accomplished was to establish office facilities. Office equipment was received on a daily basis with minimum essential equipment being in place by 24 February 1973. All secondary support equipment was on hand by 15 March 1973.

(U) The first of five conexes containing supplies, forms, publications, etc., for the headquarters arrived 12 February 1973 with the last conex being received, emptied and returned to supply channels on 15 February 1973. Storage and distribution of supplies received via conexes were somewhat of a problem due to a shortage of storage space. Bulky supplies, i.e., bond paper and other reproduction supplies, were stored in a warehouse used by the Reproduction Branch and 56th Combat Support Group Reproduction Facility.

(U) A vehicle was not assigned to this division until 23 February 1973. The delay of vehicle assignment presented a problem in coordination/liaison with base support functions.

(U) On 12 February 1973, Major Alba made a liaison visit to the office of the 56th Combat Support Group, Director of Administration. The purpose of the visit was to establish close contact with that office and to reaffirm previously agreed upon procedures and courses of action concerning support to be rendered by the 56th CSGp/DA. Support provided by the 56th CSGp/DA has been exceptional and has significantly enhanced mission accomplishment.
(U) A decentralized system for message distribution was established with each agency serviced by the Communications Terminal. 32

Administrative Branch

(U) A publications requisition/distribution system was established whereby each assigned staff agency of this headquarters has an account with the Base Publications Distribution Office (PDO).

(U) A functional reference library was established to provide Air Force directives, CINCPAC instructions, USMCTHA publications, and other government agency publications for staff agency reference.

(U) AF Form 1382 (Request for Review of Publications and/or Form(s)) was being prepared for all 7AF directives and forms. It was anticipated that forms would be forwarded to Offices of Primary Responsibility (OPR) by 30 April 1973.

(U) The following Headquarters Operating Instructions (HOIs), for which this division is OPR, have been published to date:

--HOI 5-1 - Headquarters Operating Instruction
--HOI 6-2 - Copying Management
--HOI 10-3 - Administrative Orders
--HOI 10-5 - Distribution Management
--HOI 10-6 - Standard Office Symbols
--HOI 205-2 - Use of Incinerator Facility

(U) The Hq USSAG Staff Directory was being developed with an anticipated distribution date of 15 May 1973. 33

(This page is unclassified)
Office of Information

(U) The Chief of Information was assigned as the Commander's principal advisor on Public Affairs and Command Information matters. The Chief of Information was responsible for:

--Preparation of public information annexes to contingency plans, operations and orders.

--Initial security review of information intended for public release.

--Policy guidance and staff supervision of Joint Casualty Resolution Center (JCRC) Public Affairs activities.

--Support of the CINCPAC Public Affairs Liaison Officer (MACTHAI PAO), in Bangkok, who serves as the media point of contact for U.S. military matters. He coordinates his activities with the American Embassy to ensure that the best interests of the United States are served. 34

Activities/Operations

(U) USSAG Office of Information (01) became operational at NKP on 10 February 1973 with assigned personnel strength of two officers and one enlisted man. By 31 March 1973 strength had increased to five officers and seven enlisted men. A daily news summary was initiated on 22 February 1973 for staff distribution featuring Southeast Asia, United States, and World News highlights in morning and afternoon reports.

Current Projects

(U) Release of Information Chapter of United States Air

(This page is unclassified)
Force Security Classification Guide for SEA operations was being updated.

(U) The CINCPAC Public Affairs Liaison Office in Bangkok was being provided manning assistance. Two officers and four enlisted men were on full time duty. JCRC was committed to provide one officer who will handle casualty resolution matters.

(U) A home town news release program was initiated with the Army and Air Force centers. Although release forms for Navy personnel were not yet available, releases were being forwarded to cover activities and events affecting Navy personnel.

(U) Photographic coverage of USSAG activities was being accomplished through coordination with photographers and lab facilities of Det 12, 601st Photoflight Squadron.

(U) Primary support for feature news releases was being provided by the base newspaper (NKP News).35

**USSAG/7AF Title**

(U) On 20 February, the JCS established the official title of the new headquarters organization at NKP as "USSAG/7AF." At that time the title was classified "For Official Use Only." The title "USSAG" was to be used in unofficial communications and in all communications of an unclassified nature. Subsequently, the title "USSAG/7AF" was declassified, thus allowing unlimited use of the official title.36

**USSAG/7AF Inspector General Billet**

(U) When USSAG/7AF was activated, the approved JTD required...
an Air Force Colonel to fill the billet of Inspector General (IG). While CINCPAC was reviewing the JTD, the JCS issued guidance which required the IG to be a member of a Service other than that of the Commander. Therefore, CINCPAC directed COMUSSAG/7AF to effect the change. The COMUSSAG/7AF desired that the billet be filled by a U.S. Marine Corps Colonel, with an aviation background.\(^{37}\)

**Redistribution of 7/13AF Headquarters Manpower Authorizations**

During the period 19-25 March, USSAG/7AF, in conjunction with 7/13AF at Udorn and Headquarters 13AF at Clark AB, Philippines, developed manpower redistribution proposals to deactivate Detachment 1, 7AF at Udorn and to change 7/13AF to 13AF Advanced Echelon (ADVON). In the proposals, all 7AF functions of operational command were realigned to NKP. Functions of administrative command remained with the 13AF ADVON at Udorn. CINCPAC approved the proposals, and on 28 March, 7/13AF was inactivated and replaced by the 13AF ADVON at Udorn.\(^{38}\) Of the 22 manpower authorizations realigned to the 7AF Unit Detail Listing (UDL), 7 were Contemporary Historical Examination of Current Operations (CHECO) personnel who remained with the operating location at Udorn, primarily because of facilities limitations at NKP.\(^{39}\) As a result of the overall consolidation of 7AF functions at NKP and the 13AF ADVON organization from 7/13AF assets, 34 manpower authorizations were saved. The reorganization was dictated by the move of 7AF from Saigon to Thailand. As a result of the move, there were two 7AF elements in Thailand when only one was necessary.
FOOTNOTES
CHAPTER 1


6. Msg (U), CINCPAC to COMUSMACV, 100045Z Feb 73, Subj: Activation of USSAG/7AF (U); Hq USSAG S.O. 6-1, 10 Feb 73; Hq USMACV G.O. 619, 11 Feb 73.

7. Msg (S), COMUSSAG to CJCS, 151120Z Feb 73, Subj: Commander USSAG Status Report of Selected SEA Activities (U), GDS-31 Dec 1981.

8. Hq USSAG/7AFM 20-1 (U), undated, Subj: Chapter 3, Functions and Responsibilities of Assistant Chief of Staff, J-1 (U).


10. Ibid.

11. 'Msg(C), JCS to CINCPAC, Info USSAG, 062313Z Mar 73, Subj: R and R Program (U), GDS-31 Dec 1979.

12. Msg (U), COMUSMACV to CINCPAC, 150836Z Feb 73, Subj: Joint Services Commendation Medal (U); Msg (U), CINCPAC to COMUSMACV, 162312Z Feb 73, Subj: Joint Services Commendation Medal (U).
13. Msg (U), USDAO/Saigon to COMUSSAG, 071430Z Mar 73, Subj: Joint Services Commendation Medal (U); Msg (U), COMUSSAG to USDAO/Saigon, 221315Z Mar 73, Subj: Joint Services Commendation Medal (U).


17. Msg (C), JCS to CINCPAC, Info USSAG, 231551Z Mar 73, Subj: Revision of Authority for Safe Haven/Handclasp Program (U), GDS-31 Dec 1979; Msg (C), JCS to CINCPAC, Info USSAG, 272114Z Mar 73, Subj: Continuation of Authority for Leased Housing in Bangkok (U), GDS-31 Dec 1979.

18. Msg (U), JCS to CINCPAC, Info USSAG, 270013Z Feb 73, Subj: Executive Orders 11216 and 11255 (U); Msg (C), COMUSSAG to CINCPAC, 220300Z Mar 73, Subj: Executive Orders 11216 and 11255 (U), GDS-31 Dec 1979; Msg (S), CINCPAC to JCS, 242052Z Mar 73, Subj: Executive Orders 11216 and 11255 (U), GDS-31 Dec 1981.


21. Ibid.

22. Ibid.

23. Ibid.

24. Ibid.

25. Ibid.

26. Ibid.

27. Ibid.

28. Ibid.

(This page is unclassified)
29. Ibid.
30. Ibid.
31. Ibid.
32. Ibid.
33. Ibid.
34. Rpt (U), USSAG/7AF (Ol), 15 Feb - 31 Mar 73, Subj: Historical Report (U).
35. Ibid.
37. Msg (C), CINCPAC to COMUSSAG, 090159Z Mar 73, Subj: Revision to USSAG JTD (U), GDS-31 Dec 1979; Msg (U), COMUSSAG to JCS, 131020Z Mar 73, Subj: Revision to USSAG JTD (U).
38. Msg (U), CINCPAC to CSAF, Info USSAG, 022340Z Apr 73, Subj: Redesignation of 7/13AF as 13 ADVON (U).
39. Msg (U), CS, USSAG to CMDR, 7/13AF, 250350Z Mar 73, Subj: Verification of Project CHECO Command Relationship (U).

(This page is unclassified)
CHAPTER II
INTELLIGENCE

USSAG's Intelligence organization was originally conceived and its functions and organizational structure planned for at Tan Son Nhut (TSN) Air Base, RVN by Intelligence personnel assigned to MACV several months prior to the Vietnam cease-fire. The intelligence responsibilities at MACV were transferred to USSAG in accordance with CINCPAC Intelligence Plan 2-72. This plan also provided for the continuance of some intelligence capability at USDAO/Saigon.

Shortly after the Vietnam cease-fire of 28 January 1973, an advanced party of MACV intelligence personnel travelled to NKP, Thailand, to make final preparation for the main intelligence party to arrive from MACV. This advanced contingent had made several prior trips to NKP at undisclosed dates in advance of the Vietnam cease-fire. The main intelligence party arrived at NKP during the period 10 February to 15 February 1973 and was augmented with intelligence personnel from Task Force Alpha, NKP. When USSAG assumed full operational control on 15 February 1973 the intelligence organization smoothly and efficiently assumed and carried out its full intelligence responsibilities in support of the overall USSAG mission. This most significant accomplishment was attributed to a small handful of intelligence planners at MACV who had the foresight to arrange for the transfer down to the utmost detail. The value of using experienced personnel as the
nucleus of such an organization could not be overemphasized. The physical transfer incurred absolute minimum difficulty as office equipment, files, and communications were almost completely in place by 15 February 1973. The personnel who relocated to NKPA were swiftly processed on base, quartered, and ready to go to work with minimum interference and delay.

The intelligence organization and functions as established on 15 February 1973, were submitted as the original input to a proposed USSAG/7AFM 20-1 depicting organization and functions of USSAG/7AF.\(^1\) (See Figure 3)

(U) Key personnel of the intelligence organization during this reporting period were:

---Assistant Chief of Staff J-2, Major General Eugene L. Hudson, USAF.

---Deputy Assistant Chief of Staff J-2, Colonel John R. Rantz, USA.

---Executive Officer, Lt Colonel Nicholas Yankowski, USAF.

---Chief, Targets Division, Colonel Frederick W. Fowler, USAF.

---Chief, Operational Intelligence Division, Colonel Thomas J. Mathews, USAF.

---Chief, Collections Division, Colonel Eugene Hughes, USAF.

---Chief, Intelligence Indications Division, Lt Colonel Douglas M. Schwartz, USAF.

---Chief, Support Division, Lt Colonel Bernard V. Duclos, USAF.

---Chief, Air Force Special Security Office, Captain James L. Lipe, USAF.
Collections Division (INC)

During this reporting period the Reconnaissance Branch (INCR) provided support for the reconnaissance effort in Cambodia, Laos, and South Vietnam. The continuation of the bombing in Cambodia necessitated the use of 10 missions a day for photo coverage. Reconnaissance was needed to cover the lines of communication to determine the routes used by the enemy to move troops and supplies. Missions were flown to provide bomb damage assessment in order to determine the effectiveness of the effort. Extensive area searches were also undertaken to provide film for target development.

In Laos a concentrated effort was initiated to determine the routes which were used to move men and materiel from North Vietnam into Laos and South Vietnam. Numerous trucks, tanks, and field artillery pieces were photographed moving on the road in violation of the cease-fire agreement on a daily basis. Eight aircraft per day were flown in support of this effort.

Coverage of South Vietnam was limited in quantity. The main in-country effort was directed at the Surface-to-Air (SAM) sites in the Khe Sanh area. INCR was responsible for ensuring adequate coverage of the SAM sites. Tactical Reconnaissance aircraft were not allowed to fly within a 24 Nautical Mile (NM) radius of the sites due to the danger of losing crewmembers. INCR submitted requests to the Strategic Air Command (SAC) Reconnaissance Center for coverage by Buffalo Hunter drones. The coverage was supplied on a near daily basis. The resulting coverage depicted the development of the area from one to seven sites and a great
deal of facilities improvement around the airfield.

The Electronics-Intelligence (ELINT) Section of the Collections Branch was authorized but unmanned until 5 March 1973. During the remainder of the month the following actions were taken:

--An assessment of the USSAG immediate staff and its relationship to ELINT was made. It was discovered that the Air Defense Branch (DOCA), Weapons and Tactical Branch (DOXW), Indications Division (INI), Target Management Office (TMO), Capabilities Branch (INOC), and Frag Order Branch (DOOO), were all points of frequent or daily contact.

--Similarly, it was found that the 388th Tactical Fighter Wing (TFW) at Korat, Thailand, was the only unit possessing an ELINT collector. Five aging EB-66C aircraft were the sole assets in 7AF. Although other aircraft such as the EB-66E and EF-105 might be categorized as quasi-collectors, this was not their primary mission.

The bulk of ELINT collection in SEA was done by 7th Fleet and other national assets.

--No Electronic Order of Battle (EOB) was in existence at USSAG; however, one was plotted on an overlaid wall chart. Operational reports from all ELINT collectors flying in SEA were sought. As of 31 March 1973, several were being received. Communications were established with Defense Air Attache Office's in all friendly SEA countries to establish a friendly EOB. The Pacific Command (PACOM) ELINT Center (PEC) was also informed that USSAG was operational in the ELINT field.

--Lines of communications were established with the 388th TFW
responsible for analysis and reporting of EB-66C sorties. The Collections Branch began to task the 388th TFW to collect ELINT to satisfy COMUSSAG needs.

--A principal action was the advancement of a "Signal Intelligence (SIGINT) Proposal" which advocated the employment of collectors presently operational in SEA in a new manner. This proposal was advanced to the stage of a finished package within the Directorate by the end of the month.

Operational control of the Airborne Radio Direction Finding (ARDF) program was assumed by USSAG on 15 February 1973. Daily missions continued to be flown without any interruption. ARDF assets included 22 USAF EC-47 aircraft stationed at NKP and Ubon and operated by the 361st Tactical Electronic Warfare Squadron. Six USAF U-21 aircraft were stationed at Udorn and operated by the 7th Radio and Research Field Station Aviation Detachment.

Three of the six U-21 ARDF aircraft at Udorn (one RU-21 and two JU-21's) were deployed to Thailand from RVN on a temporary basis until X+60, when an evaluation of the requirement to continue their operation was made. On 18 March 1973, COMUSSAG requested CINCPAC approval for permanent retention of the three U-21 aircraft to enable fulfillment of intelligence requirements. The decision by CINCPAC was still pending as of 31 March 1973.

On 8 March 1973, ARDF resources were significantly re-aligned to provide increased coverage in Cambodia at the request of the Ambassador and DAO, Phnom Penh. General Vogt, COMUSSAG, directed the change based on both these requests and the tactical

* Proposal not defined because of security limitations.
situation in Cambodia.

The threat to ARDF aircraft became a matter of extreme concern in view of the lack of other U.S. aircraft flying similar areas. On 7 March 1973, Major General Hudson, Assistant Chief of Staff J-2 (Intel), recommended the Assistant Chief of Staff J-3 (Operations), direct any ARDF aircraft fired on by Anti-Aircraft Artillery (AAA) to immediately leave the frag and obtain divert or return to base instructions. This recommendation was incorporated into the daily frag order instructions.

Final coordination and recommended changes were accomplished in COMUSSAG to CINCPAC message 250200Z Mar 73. The changes ensured USSAG's full operational control of ARDF assets in Southeast Asia and also, prescribed interface channels with USDAO, Saigon.

HUMAN INTELLIGENCE (HUMINT) SECTION

The HUMINT Section of the Collections Branch was authorized on 15 February 1973. It was a newly formed section established to serve as the OPR on HUMINT matters for the J-2, USSAG. Section activities during this operational set-up period involved establishment of lines of communications with the HUMINT elements in Southeast Asia under USSAG's tasking authority: Air Intelligence Group, 5th Military Intelligence Group, USDAO, Saigon, the creation of an Intelligence Collection Requirements (ICR) file, and the tasking of HUMINT collections elements to satisfy USSAG and higher headquarters intelligence requirements.
Since USSAG did not have any published requirements at activation, a request for Essential Elements of Information (EEI) was sent on 20 February 1973 to the Operational Intelligence (INO), Indications (INI), and Targets (INT) divisions of J-2, USSAG. The inputs were correlated by the HUMINT Section and an EEI message was published. After USSAG had received its ICR registry, the EEI list was reviewed and ICR U-UPE-U1921 was published by USSAG. With the publication of ICR U-UPE-U1921, the EEI published by USSAG was covered by formal tasking documents. In conjunction with the publication of EEI, a draft of a collection plan for the HUMINT Section was written. The draft collection plan outlined the mission and functions of the HUMINT Section, Collectors Branch, Collectors, and Division, J-2, USSAG.

The HUMINT Section conducted liaison with Estimates Branch, Operations Division, J-2, USSAG, and with the Arc Light, Tactical Targets, and Aerial Reconnaissance Sections as necessary. Liaison was performed to insure that interested sections are getting the HUMINT reports from the collecting agencies, to generate collection requirements levied on the collection agencies in response to the analysis needs, and to obtain evaluations of the information reports. The evaluations could then be returned to the collectors for their use. Specific collection requirements in response to requests for information, were levied on collection agencies. Requests generated since the activation of USSAG included Bomb Damage Assessment (BDA) on the results of reconnaissance, further information on reported deployments of a SAM missile system in
South Vietnam, and tactical information on the Thakhek area of Laos. 3

Support Division (IND)

(U) IND assumed the functions of the Support Branch of the Air Intelligence Division, Directorate of Intelligence, MACV, and organized two branches. Reports Branch and Presentations Branch. Upon transfer to USSAG several major duties were eliminated. IND was no longer required to prepare the COM7AF Daily Situation Message, the J-2's input to the COMUSMACV Daily Situation Message, or the input to the COMUSMACV's Commander's Staff Conference Briefing. However, several major duties were added since the transfer. These included preparing J-2's input to COMUSSAG's Daily Status Report of Selected SEA Activities, responsibility for J-2's budget and J-2's history. In addition, IND became the central coordinator in J-2 for Intelligence Plans and for Annexes to Operational Plans. IND continued to compile all Tactical Air (TACAIR) and Gunship BOA and brief COMUSSAG and staff on a daily basis. IND experienced a smooth transfer and assumed full briefing responsibilities on 15 February 1973. One problem encountered during the transition included getting all the Operations Report 4's in time for the daily briefings. This problem stemmed from inexperienced personnel at the Communications Center who distributed the Operations Reports. The Communications Center was manned with all TDY personnel and had a large workload. The problem was quickly eliminated when IND started getting Operations Reports distribution directly from the
Strike Computer. A summary of the significant TACAIR and Gunship BDA reported/briefed was prepared during this reporting period. (See Figure 4).

(U) IND prepared a briefing on Linebacker II and helped present it to B-52 personnel at U-Tapao Air Base on 10 March 1973. The briefing was presented three times and was well received. IND also briefed BDA to the USAF Vice Chief of Staff, General Wade, on 30 March 1973.

When USSAG became operational on 15 February 1973, IND was responsible to prepare J-2's input to the "COMUSSAG Daily Status Report of Selected SEA Activities." Originally this input was small and consisted only of reporting TACAIR and Gunship BDA in Laos. The scope of this report grew as the United States became more involved in the war in Khmer and as the intelligence role assumed wider proportions. By 31 March 1973, IND was responsible to include in the COMUSSAG's daily report the following items in addition to the original TACAIR and Gunship BDA:

--Sensor Activity. This input was received from INT on a daily basis.

--Photo Reconnaissance Summary. This input was received from the 432nd Reconnaissance Technical Squadron (RTS), Udorn AB, Thailand. The 432nd RTS provided IND a detailed significant item sheet summary each morning of photography exploited during the previous 24 hours. This information was then summarized by IND and included in the daily report.

--Arc Light BDA. INT provided IND a detailed listing of Arc
SIGNIFICANT BDA
REPORTED BY 1ND
15 FEBRUARY THROUGH 31 MARCH 1973

KHMER
1. Structures/bunkers/fortified Fighting Positions: 522 Destroyed/
   106 Damaged
2. WBLC: 191 Destroyed/80 Damaged.
3. AAA: 12 Destroyed/1 Damaged.
4. Heavy Machine Guns: 22 Destroyed/1 Damaged.
5. APC: 2 Destroyed/5 Damaged.
6. Mortar: 17 Destroyed/1 Damaged.
8. Tanks: 9 Destroyed/5 Damaged.
10. Road Cuts: 390
11. Ford Cuts: 79
12. Trailers: 7 Destroyed/5 Damaged.
14. Enemy KBA: 1,279
16. POL Tanks: 8 Destroyed/3 Damaged
BARREL ROLL

1. Structures/bunkers/fortified fighting positions: 93 Destroyed/35 Damaged
2. AAA: 2 Destroyed/3 Damaged.
3. Trucks: 25 Destroyed/13 Damaged.
4. Road Cuts: 20
5. Enemy KBA: 155
6. POL Barrels: 152 Destroyed.
7. APC: 1 Damaged.
8. Construction Vehicles: 1 Destroyed

STEEL TIGER

1. Structures/bunkers/fortified fighting positions: 229 Destroyed/76 Damaged
2. AAA: 5 Destroyed/2 Damaged.
3. Trucks: 158 Destroyed/71 Damaged.
4. Tanks: 4 Destroyed/6 Damaged.
5. Construction Vehicles: 1 Destroyed.
6. Road Cuts: 41
7. Ford Cuts: 15
8. Enemy KBA: 52
10. Supply Stacks: 28 Destroyed.
11. WBLC: 3 Destroyed.
12. Bridges: 3 Destroyed/4 Damaged.
13. APO: 3 Destroyed/1 Damaged.
Light targets struck and BDA. IND summarized this information and included it in the daily report.

--F-111 Target Information. INT also provided IND detailed information on F-111 preplanned targets which was used in conjunction with reporting F-111 BDA.

--ARDF Mission Results. IND obtained from the 6994th Security Squadron EC-47 ARDF and U-21 mission results on a daily basis for inclusion in the daily report.

--Significant Intelligence Items. IND was tasked almost daily by COMUSSAG to summarize significant intelligence events for inclusion into the daily report. This usually involved coordinating with several sources for collecting and collating pertinent data.

Operational Intelligence Division (INO)

(U) INO was established on 15 February 1973 and later re-organized to include three branches: Estimates Branch (INOE), Situation Branch (INOS), and Capabilities Branch (INOC). The overall responsibility of INO was to maintain an accurate assessment of the current situation with regard to enemy capabilities and intentions. This responsibility was divided between the branches as follows:

--INOE. Maintain an accurate assessment of the current enemy ground order of battle with respect to location, strength, combat capability, and intentions using all sources available. Prepare special and summary intelligence reports for dissemination to higher, lateral, and subordinate units.
INOS. Maintain a 24-hour per day, seven-day per week Situation Room and present daily and special briefings to provide the current situation to the USSAG Command structure for operational planning purposes.

INOC. Maintain an accurate assessment of the current enemy aircraft, surface to air missile, and anti-aircraft artillery order of battle. Prepare special and advisory intelligence reports for dissemination to higher, lateral, and subordinate units.

(U) In addition to providing material for the ground situation briefing, the Estimates Branch produced a major input to Operations Plan J001 on 27 February 1973. Preparation and dissemination of both the USSAG Daily Intelligence Summary and Weekly Watch Report were begun on 18 March 1973.

(U) The enemy situation briefings were initially held in the COMUSSAG Conference Room. A new briefing room was constructed within an area designated for Special Intelligence (SI) information, since these briefings normally include this type of information. The J-2 Situation Room was completed and first used on 4 March 1973 and was in daily use since that date. A detailed resume of these daily situation briefings is precluded due to the classification of the material. Special briefings given during this reporting period included a Wing Commanders Conference on 21 March, and a briefing for the USAF Vice Chief of Staff, General Wade, on 30 March 1973.

The major significant effort by the Capabilities Branch
involved the detection and analysis of SA-2 SAM sites in the Khe Sanh area of South Vietnam. The first site was noted on 17 February with additional sites noted on 18 and 21 February 1973 as being occupied. All three sites were confirmed as unoccupied on 6 March, with no sites noted occupied until one new site was noted on 21 March 1973. Three additional sites were noted on 30 and 31 March 1973, two of which were occupied. At the end of this period, photographic reconnaissance had detected the preparation of seven sites, three of which were occupied and capable of launch.

(U). In addition to the above activity, one officer from the Capabilities Branch was assigned TDY to the DAO, Phnom Penh, Cambodia, on 8 March for support and liaison purposes.

(U) USSAG HQ Operating Instruction 200-1 was prepared and published on 15 March to establish procedures for the use and scheduling of the J-2 Situation Room and the format and authorized attendance for the Commander's Situation Briefing. 5

Intelligence Indications Division (INI)

On 16 March 1973, USSAG was designated a member of the DOD Indications System. The Indications functions within USSAG were supported by the Operational Intelligence and Indications Divisions. This division of the function was necessitated by space limitations and the physical location of the Air Force Special Security Office (AFSSO). The functions were divided as follows:

--The Indications Division was collocated with the AFSSO and did all of the preliminary analysis of Special Intelligence traffic
in support of Indications. All general service traffic analysis was performed by the Operational Intelligence Division.

---The Indications Division served as the focal and contact point for all matters involving the DOD Indications System.

---The Operational Intelligence Division prepared the Watch Report and other reports which required in-depth analysis, and supported the Indications Division in the analysis of general service traffic regarding indications of enemy threats.

Air Force Special Security Office (INS)

(U) On 15 February 1973, at 0001Z, AFSSO 7AF, at Tan Son Nhut AB, RVN, ceased all operational support provided to the Commander, 7AF, his staff, and subordinate units. All classified materials were packed and shipped to Hq USSAG via the Armed Forces Courier System. Communications equipment was removed by the 1964th Communications Group, Air Force Communications Service (AFCS) and shipped to the AFCS depot. Six buildings within the AFSSO 7AF were vacated and turned over to the Tan Son Nhut Base Closure Office on 20 February 1973.

(U) AFSSO NKP became operational on 15 February 1973 at 0001Z as communications supporter for the Commander, USSAG/7AF and staff. AFSSO NKP processed the paperwork needed to transfer and indoctrinate approximately 200 personnel being assigned to Hq USSAG, while being only 62 percent manned during the period of 15 February through 10 March 1973. Message activity handled by the AFSSO Communications Center more than doubled for both incoming and
outgoing message traffic.

(U) A Special Activities Office (SAO) for support of the Hq USSAG Intelligence function was established during the period of 15 February to 1 March 1973 at which time it was activated. This function was operated by the AFSSO and supported by the AFSSO Communications Center.  

Target Division (INT)  

With the transfer to NKP and establishment of Hq USSAG/7AF, INT formed a new Target Development Branch (INTD) to focus INT photo exploitation efforts into a single agency. The Branch was responsible for the review of all incoming intelligence for target leads, for the request for photo reconnaissance of suspected target areas, and initial scanning of all photo reconnaissance for targets. The branch then passed targets/target leads to the Tactical Targets and/or Arc Light Branches as appropriate. INTD's primary emphasis has been on development of targets in Cambodia during this period. The branch passed approximately 90 target leads to Tactical Targets and 30 to Arc Light Branches. INTD also provided Tactical Targets with information on Steel Tiger infiltration routes for use in contingency plans in that area.

(S) No significant changes in organization, operations, manning or key personnel occurred in the Arc Light Branch during this period. The physical transfer of material and personnel from TSN to NKP was completed on 15 February 1973. The move and concurrent phase-cver of operational responsibility from the TSN

* Nickname for operations area in southern Laos.
developed after the Laotian cease-fire of 23 February 1973 and lasted until the beginning of March when the tempo of U.S. combat air operations in Khmer was stepped-up. This quickened tempo continued through 31 March and was coupled with a huge North Vietnamese Army build-up in South Vietnam, Laos, and Khmer. By 31 March 1973, Intelligence's role in USSAG had become significant and extremely critical to the eventual success of U.S. SEA operations.
FOOTNOTES

CHAPTER II.

1. Hq USSAG/7AFM 20-1 (U), undated, Subj: Functions and Responsibilities of Assistant Chief of Staff, J-2 (U).

2. Msg (S), COMUSSAG to CINCPAC, 250200Z Mar 73, Subj: Operational Control of ARDF Assets in SEA (U), GDS-31 Dec 1981.


4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

(Tall page is unclassified)
CHAPTER III
OPERATIONS

Transition

The transition from MACV to USSAG/7AF was accomplished without a major hitch. To compensate for that portion of the phase-in period lost by country clearance problems, personnel movement was compressed such that by 12 February the planned schedule was resumed. By the take-over date (15 February 1973) 53 percent of the headquarters personnel were in position. In preparation for the transition of operational control from MACV to USSAG, the complete frag for 15 February directing over 500 USAF, Navy, and Marine sorties was prepared, computerized, and transmitted from Saigon to all units on the day prior to take-over. At 0700 hours on 15 February, command and control of air operations was assumed by Headquarters USSAG/7AF with relative ease. Prepositioned computers at NKP were loaded with current data flown from MACV on the night of 14 February, and on 15 February the first Frag Order was dispatched from NKP with no problems experienced. Subsequent operations progressed smoothly.

Manning

As of 29 March the headquarters and combined add-on positions, excluding JCRC, averaged 90 percent manning. This included all personnel who were expected in from the RVN. (See Figure 5).
<table>
<thead>
<tr>
<th>Authorized</th>
<th>Assigned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>USSAG</td>
<td>595°</td>
<td>555</td>
</tr>
<tr>
<td>JCRC</td>
<td>154</td>
<td>120</td>
</tr>
<tr>
<td>Add-Ons</td>
<td>363</td>
<td>312</td>
</tr>
</tbody>
</table>

Includes 95 spaces on the 7AF UDI!

As of 29 Mar
 Facilities

Since late November, when the go-ahead was given to reconfigure the Task Force Alpha (TFA) facility to accept USSAG headquarters, the original 27,000 square feet of office space was expanded to over 57,000 square feet. This was accomplished by installing custom houses and administration porta-kamps. Additionally, 10,000 square feet of office space was procured on the main base. Concurrently with the expansion of the headquarters complex, living quarters were expanded by installing modular dormitories, trailers, and porta-kamps to take care of the net increase of well over 800 personnel on the base. The communications capability installed within the new headquarters was essentially the same as was available at MACV. The compass link and DAPP vans were installed adjacent to the headquarters. The compass link equipment was utilized for transmission of intelligence photographs via Satellite since early February. Compass link shares the same satellite communications path with muscle trunk. The muscle trunk circuit provided by the satellite terminal provided an excellent quality secure voice circuit to Hawaii and Washington when satellites were available in the hemisphere. The DAPP Van received Weather Satellite Signals which, when converted, provided the weather picture for all SEA. 2

Locations of U.S. Air Assets

Air Force Tactical Fighter Wings and Marine Air Group 15 were located at six Thailand bases. SAC maintained B-52 assets at
U-Tapao and Guam to meet Arc Light strike requirements. SAC KC-135 tankers located at U-Tapao provided air-to-air refueling for Thailand based fighters which gave them the range to strike targets anywhere in SEA. (See Figure 6).

**USSAG Controlled Air Assets**

USSAG strike aircraft included F-4s, F-111s, A-7s, Marine A-6s, and AC-130 gunships. Of the 67 A-7s at Korat, 27 were permanently assigned to the 388th TFW and the remainder belonged to the 354th TFW. C-130 Airborne Command and Control aircraft and OV-10 FAC aircraft provided direction for air strikes. The Airborne Command Control Center (ABCCC) aircraft, in addition to the primary function of controlling strike aircraft, were being used as relay platforms for signal transmissions from unattended ground sensors located along the various enemy lines of communications. This system monitored enemy logistics activities. Another somewhat different mission was performed by C-130s operating from Korat which participated in an intelligence collection operation directed by the United States Air Force Security Service. The C-130E at Takhli disseminated psychological warfare materials. This operation was restricted to the Khmer Republic. Other support aircraft included EC-47s and U-21s used for the intelligence mission of airborne radio direction finding; RF-4s for photo reconnaissance; F-105s for SAM suppression; and EB-66s for jamming support for fighters and B-52s. The EC-121s as an airborne platform, were used to extend the USSAG radar coverage. USSAG C-130
aircraft assets were transferred to the operational control of PACAF at X-Day plus 55. (See Figure 7).

The establishment of USSAG was essentially complete when operational control of tactical combat air operations in SEA was transferred from MACV to USSAG on 15 February 1973.

From that date, USSAG continued to direct full strike operations in Laos, terminating as of the Laotian cease-fire on 22 February. In the Khmer Republic, air strikes, FAC operations and convoy escort were conducted as required. Support air operations were also continued at the direction of USSAG in the form of photo reconnaissance of Launch Operation Centers (LOCs) and intelligence requested targets, as well as EC-47 and U-21 missions in Laos, RVN, and the Khmer Republic.³

**Mission FRAG**

All strike operations were limited to the Khmer Republic with 158 Tactical Air, 12 Gunships, and 60 B-52 strike sorties scheduled daily. Since the Laotian cease-fire, in addition to the flying schedule previously mentioned, USSAG maintained a daily strike force as well as support aircraft on ground alert for timely response to approved strike requirements. (See Figure 8).

**Radar Sites Tactical Air Control**

The extensive SEA Tactical Air Control System consisted of land, air, and sea based radars. The USAF radar sites in Thailand, augmented by the EC-121 Airborne Radar Platform* and the Navy

* The callsign for the EC-121 Aircraft Early Warning System is "DISCO."
<table>
<thead>
<tr>
<th>Available Resources by Unit/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8 TFW Ubon</strong></td>
</tr>
<tr>
<td>F-4 187</td>
</tr>
<tr>
<td>OV-10 27</td>
</tr>
<tr>
<td>AC-130 14</td>
</tr>
<tr>
<td>EC-47 6</td>
</tr>
<tr>
<td><strong>474 TFW Takhli</strong></td>
</tr>
<tr>
<td>F-111 45</td>
</tr>
<tr>
<td>C-130E 11</td>
</tr>
<tr>
<td><strong>300 TFW (354 TFW) Korat</strong></td>
</tr>
<tr>
<td>F-4 24</td>
</tr>
<tr>
<td>A-7 67</td>
</tr>
<tr>
<td>F-105 23</td>
</tr>
<tr>
<td>ED-66 22</td>
</tr>
<tr>
<td>C-130E 8 (ABC66)</td>
</tr>
<tr>
<td>EC-121 8</td>
</tr>
<tr>
<td>C-130E 4 (USAFSS)</td>
</tr>
<tr>
<td><strong>NAM Phong</strong></td>
</tr>
<tr>
<td>F-4 24</td>
</tr>
<tr>
<td>A-5 10</td>
</tr>
<tr>
<td><strong>432 TFW Ubon</strong></td>
</tr>
<tr>
<td>F-4 181</td>
</tr>
<tr>
<td>RF-4 22</td>
</tr>
<tr>
<td>U-21 4 *</td>
</tr>
<tr>
<td><strong>58 SOW NKP</strong></td>
</tr>
<tr>
<td>OV-10 24</td>
</tr>
<tr>
<td>EC-47 13</td>
</tr>
</tbody>
</table>

*Army
<table>
<thead>
<tr>
<th>STRIKE</th>
<th>KILOM</th>
<th>STEEL TIGER</th>
<th>DRUMEL ROLL</th>
<th>SOUTH VIETNAM</th>
<th>THREAT SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-111</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-4</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-4</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-4</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-7</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-52</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-130</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-106</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB-69</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF-4C</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OV-10</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAC TANKERS</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-47</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>U-21</td>
<td>1</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

* STRIKE CAPABLE
Tactical Data System through the Navy radar ship called "Red Crown," provided the required radar coverage. The USSAG/7AF Tactical Air Control Center (TACC)(Blue Chip) was tied into the net through the North-Sector TACC, "Motel Alpha." (See Figure 9). The North-Sector TACC, located at Udorn was normally interfaced with Air Force radars, including the EC-121 Airborne Radar Platform, the Navy, and Security Service for all-source SEA tactical data. (See Figure 10). Information from SIGINT and radar sources was routed through Udorn, NKP, and Red Crown respectively. This provided current information from the various sources to a central activity for force monitoring and control purposes. (See Figure 11).

Command Control

The Commander, USSAG/7AF, through the Chief of Staff and the Assistant Chief of Staff/Operations maintained command and control of U.S. air assets utilizing the capabilities of an extensive command and control system. Daily tasking of individual operational units was accomplished by using a computerized Frag Order which was designed for self execution by directing an event time (time over target). The TACC could direct cancellations, diversions, delays, and ordnance changes based on weather changing priorities or other operational considerations. The air defense functions managed the system for the protection of U.S. land based assets in SEA. The Target Management Office served as the central point of expertise on Rules of Engagement and air operating
SEA TACTICAL DATA SYSTEM INTERFACE
SEA TACTICAL DATA SYSTEM INTERFACE

COMBAT APPLE (EC-135A SIGHT)

OLYMPIC TORCH (U-2A SIGHT)

DEEP SEA (EC-121/EA-65 SIGHT)

6624 SECURITY SQ UDCRN

6609 SECURITY SQ RKP

TEASAIL UDCRN

CTF 77 RED GROUND

CRANEHALL RADAR

LIGHT RADAR

BARTY RADAR

TAGG-93 HOTEL ALPHA UDCRN

TAGG BLUE CHAP RKP
authorities. (See Figure 12).

**BLUE CHIP**

The Battle Staff Director (BSD), through the Senior Duty Officer (SDO) insured that the detailed functions of command and control were carried out within the TACC (BLUE CHIP). Under the SDO were five officer controllers; one each for FAC aircraft, Gunship activity, Fighter Mission Launch Control, Tanker Refueling and a Defense Duty Officer. The Defense Duty Office monitored the air defense capabilities, was responsible for ensuring B-52 aircraft support aircraft were on station, as well as monitoring other Airborne Communications, ELINT, and SIGINT aircraft. Extensions of TACC were the Airborne Command and Control Centers, Tactical Unit Operations Centers, VNAF Direct Air Support Centers (DASCs), and the Ground Radar Stations, or Ground Controlled Intercept (GCI) sites.\(^4\) (See Figure 13).

Extensions of Command and Control

As an example of command and control, a target, validated by proper authority, and approved by COMUSSAG, could be struck by quick reaction alert fighters launched at the direction of the Launch Control Officer (LCO) in the TACC. Once airborne, the fighters were vectored by GCI to a predesignated rendezvous point, checked in with ABCCC, who then handed them off to the FAC for final strike information. Diversions could be made through ABCCC or GCI as requirements dictated. Although U.S. personnel were removed from the DASCs in Vietnam, a direct line to each of those
which orbit would best support the mission. For example, the Gulf of Tonkin orbits would be utilized to support operations over NVN (See Figure 18).

Southeast Asia Data Base (SEADAB) Retrievals

The Data Management and Analysis Branch supported the Operations Analysis Branch and the Operations Briefing Branch by obtaining data retrievals from the SEADAB. It was notable that SEADAB and its associated retrieval programs were fully operational as of 16 February 1973, when the Operations Report (OPREP) data was first entered into the system at NKP.

The following tabulations depict data for U.S. strike sorties flown during the period 14-27 February. This period covered the OREP weeks that bracket the initiation of operations from USSAG and the Laotian cease-fire.

U.S. TACAIR Sorties Flown, by Service

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>SORTIES FLOWN</th>
<th>WT OF EFFORT</th>
<th>DAILY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAF</td>
<td>2336</td>
<td>71.4%</td>
<td>167</td>
</tr>
<tr>
<td>USN</td>
<td>652</td>
<td>19.9%</td>
<td>47</td>
</tr>
<tr>
<td>USMC</td>
<td>284</td>
<td>8.7%</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>3272</td>
<td>100.0%</td>
<td>234</td>
</tr>
</tbody>
</table>

U.S. TACAIR Sorties Flown, by Operating Area

<table>
<thead>
<tr>
<th>AREA</th>
<th>SORTIES FLOWN</th>
<th>WT OF EFFORT</th>
<th>DAILY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrel Roll</td>
<td>982</td>
<td>30.0%</td>
<td>70</td>
</tr>
<tr>
<td>Steel Tiger</td>
<td>1996</td>
<td>61.0%</td>
<td>143</td>
</tr>
<tr>
<td>Khmer</td>
<td>294</td>
<td>9.0%</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>3272</td>
<td>100.0%</td>
<td>234</td>
</tr>
</tbody>
</table>
ARCLIGHT Sorties Flown, by Operating Area

<table>
<thead>
<tr>
<th>AREA</th>
<th>SORTIES FLOWN</th>
<th>WT OF EFFORT</th>
<th>DAILY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrel Roll</td>
<td>269</td>
<td>37.0%</td>
<td>19</td>
</tr>
<tr>
<td>Steel Tiger</td>
<td>401</td>
<td>55.2%</td>
<td>29</td>
</tr>
<tr>
<td>Khmer</td>
<td>57</td>
<td>7.8%</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>727</td>
<td>100.0%</td>
<td>52</td>
</tr>
</tbody>
</table>

AC-130 Gunship Sorties Flown, by Operating Area

<table>
<thead>
<tr>
<th>AREA</th>
<th>SORTIES FLOWN</th>
<th>WT OF EFFORT</th>
<th>DAILY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrel Roll</td>
<td>16</td>
<td>14.8%</td>
<td>1</td>
</tr>
<tr>
<td>Steel Tiger</td>
<td>69</td>
<td>63.9%</td>
<td>5</td>
</tr>
<tr>
<td>Khmer</td>
<td>23</td>
<td>21.3%</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100.0%</td>
<td>8</td>
</tr>
</tbody>
</table>

The following tabulations reflect U.S. strike sorties flown in Khmer from 28 February through 31 March:

<table>
<thead>
<tr>
<th>TYPE OF SORTIE</th>
<th>SORTIES FLOWN</th>
<th>WT OF EFFORT</th>
<th>DAILY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACAIR</td>
<td>3982</td>
<td>72.4%</td>
<td>124</td>
</tr>
<tr>
<td>ARCLIGHT</td>
<td>1210</td>
<td>22.0%</td>
<td>47 *</td>
</tr>
<tr>
<td>GUNSHIP</td>
<td>308</td>
<td>5.6%</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>5500</td>
<td>100.0%</td>
<td>172</td>
</tr>
</tbody>
</table>

* This rate was based on 26 days operations, 6-31 March.

Operations Branches Combined

(U) Prior to relocating to NKP, the Operations Plans Branch MACV Directorate of Operations (DO-23) and the Linebacker Operations Branch MACV DO-26 were combined within the Air Operations Division/MACV. This combination was effected on 6 January 1973.
The intent of combining DO-23 and DO-26 was elimination of duplication in the plans, fragmentary orders, and tactics areas. Another objective was increased efficiency by streamlining the branches. Upon relocating to NKP this combined function was re-designated Current Operations Division under the Assistant Chief of Staff, Operations, USSAG. On 1 March 1973, this division again reorganized and was divided into two divisions; Operations Plans Division J-3/(DOX), and Current Operations Division J-3/(DOO). Within J-3/DOX there were five branches; Contingency Plans Branch, Programs Branch, Weapons and Tactics Branch, Requirements Branch, and Air Traffic Control Branch. The functions of J-3/DOX included the management, supervision, coordination, and implementation of all operations plans. In addition, this division was responsible for SEA force structure, monitoring command relationships, tactics developments and weapons systems evaluations, and monitoring of tactical operations in SEA.

Relocation

(U) J-3/DOX was in place and operational at NKP on 15 February 1973. Overall, the relocation effort was executed swiftly and efficiently with the primary problem being increased administrative workload with a corresponding shortage of administrative personnel. A less significant problem was acquisition of office furniture with primary emphasis on security containers.

Operational Requirements

(U) Requirements Branch determined operational requirements
for new or improved systems, subsystems, and equipment. In coordination with operational units and staff agencies, it identified, staffed, prepared, and published qualitative Combat Required Operational Capabilities (CROCs). This branch also maintained status of CROCs after approval by Headquarters USAF and coordinated and authenticated modifications to systems or equipment.

(U) On 18 February, all units were advised that the Commander, 7AF, was still authorized to establish CROCs. The following CROCs have been established:

--CROC 3-73, Improved A-7 Drop Tanks. Requirement was to provide the A-7D aircraft used in the Search and Rescue (SAR) role with drop tanks having a decreased probability of fire or explosion.

--CROC 6-73, Increase in F-111A Aircraft Allowable Gross Weight. Requirement was to modify F-111A aircraft landing gear to increase taxi and takeoff allowable gross weight.

--CROC 7-73, Helicopter Visual Acquisition. Requirement was for a system to assist escort aircraft to visually acquire the HH-53 helicopters.

**Force Structure and Tactical Air Resources**

(U) The Programs Branch monitored and coordinated the overall force structure and tactical air resources in SEA. It also maintained close liaison with the Weapons/Tactics Branch on movement of air resources and status of all weapons systems. This branch monitored all munitions data, status of command relationships, and

(This page is unclassified)
deployment of TACAIR forces in SEA.

(U) All personnel assigned to this branch were in place at NKP by 15 February 1973. At that time the branch was designated "Special Staff Actions." After the Operations Plans Division J-3/DOX was reorganized, the "Special Staff Actions Branch" became the "Programs Branch" under J-3/DOX. The contingency plans function, previously assigned to Special Staff Actions, was assigned to a new Branch within J-3/DOX designated as "Contingency Plans." During the early transition period from Special Staff Actions to the Programs Branch, this branch developed an operations plan for the re-introduction of U.S. Air Forces into RVN, contingent upon directions from higher authority. Additionally, the branch became the OPR for compiling the Organization and Function Manual for USSAG/7AF.

The responsibilities included programming munitions requirements for current operations and contingency plans, and monitoring current and future beddown forces under the operational control of COMUSSAG. One of the most important actions regarding program force structure during this period was the change from Time Phase to an Event Phase beddown force structure in Thailand. Translated, this meant that the COMUSSAG retained his current air assets until the political/military events allowed for a reduction in forces to begin.

**Tactics Development**

(U) The Weapons and Tactics Branch J-3/DOXW was responsible for development of tactics for the employment of fighter,
reconnaissance, electronic warfare, and specialized aircraft and associated weapons and electronic systems. Also, this branch maintained close liaison with operational units to gain insight into problems associated with tactics, weapon systems, and electronic warfare and gunship operations. In addition, this branch was OPR for 7AFM 55-1 (TACAIR Operational Procedures), monitored new weapon systems in the theater, and coordinated with the Requirements Branch on CROCs and modification requirements.\(^\text{15}\)

(U) J-3/DOXW was supplemented in latter February with Electronic Countermeasures (ECM), AC-130, and RF-4C reconnaissance personnel to provide an integrated weapons and tactics branch. The efforts of DOXW during this time frame were influenced by the Vietnam cease-fire and the desire to maintain and update combat capability in this environment.\(^\text{16}\)

(U) Of prime importance following the cease-fire was the establishment of aircrew training programs to maintain pre cease-fire combat capability. The I3AF had responsibility for all training conducted by Thailand units and developed plans to conduct such training. These plans were reviewed by J-3/DOXW personnel to ensure that combat capability would be maintained.\(^\text{17}\)

In addition to I3AF training plans, J-3/DOXW developed a plan, and wrote and published an Operations Order (OPORD) (USSAG/7AF OPORD 73-1), nicknamed Commando Scrimmage, which provided for multi-unit Linebacker type mission exercises. This exercise would expose newly assigned personnel to the demanding nature of these type missions and would exercise all forces and agencies that would
air-to-ground rocket propelled missile designed for employment against tanks, armored vehicles, and reinforced field fortification type targets. The missile was guided by an electro-optical centroid tracker. Between 10 January and 28 February, the introduction was conducted at the 432nd Tactical Reconnaissance Wing (TRW), Udorn Royal Thai Air Force Base, Thailand. Although it was a limited evaluation, it appeared that the Maverick was a very reliable system. Of the 17 missiles launched, 12 (70 percent) were direct hits. Weather, terrain, foliage, and availability of suitable targets would continue to be the major limiting factors in the employment of this weapon system.23

Contingency Plans

(U) On 25 February, the Contingency Plans Branch, J-3/(DOXC), under the Operations Plans Division, was organized by the USSAG/J-3 realignment of planning and operational functions within the Staff Agency. Therefore, historical data prior to that date was non-existent. The functions of this office included:

--Development of USSAG/7AF plans in support of higher headquarters (JCS, CINCPAC, CINCPACAF) plans.

--Monitoring USSAG/7AF plans in support of higher headquarters plans to insure currency.

--Monitoring plans of subordinate units to insure currency and responsiveness to USSAG/7AF plans.

--Monitoring force strength and development to insure responsiveness to USSAG/7AF plans and identifying current force
Operations Plans Division, on all matters pertaining to air traffic control, airspace, and navigation aids. It managed, identified, reviewed, determined, and implemented air traffic control, airspace, and navigation aid requirements in support of the USSAG mission. It developed policy, procedures, and criteria in support of the USSAG mission, and higher headquarters directives, to insure the effective application of air traffic control, navigation systems, and resources. This branch also developed supplements to higher headquarters directives, and prepared USSAG/7AF regulations, manuals, publications, and changes thereto, which pertained to air traffic control, airspace, and navigation aids. Branch personnel maintained liaison, coordinated, and conferred with appropriate activities and agencies of the U.S. and foreign governments and international organizations as required.

**Mid-Air Collision Potential**

(U) During this reporting period there were several instances of near mid-air collisions. These fell into two areas; U.S. Air Force tactical aircraft and civil air carriers transiting airway Amber I between Bangkok and Ubon, and two refueling orbits. As a corrective action, negotiations were completed with Bangkok Area Control Center for a corridor of airspace from Korat Tactical Air Navigation (TACAN) east-southeast across airway Amber I (between Bangkok and Ubon) to the Khmer border. This airspace corridor was established to provide a safe route for F-111 operations to and from Takhli Royal Thai Air Force Base, Thailand.25
B-52 Operations

(U) The B-52 Operations Branch of MACV relocated to NKP along with the establishment of USSAG/7AF. The branch was designated as the B-52 Operations Division, J-3/(DOB). The transfer of functions to the new headquarters was completed on 15 February 1973 without degrading the daily Arc Light weight of effort.*

(U) Subsequent to relocation the division was reorganized and two branches, Special Actions and Current Operations, were established. The Special Actions Branch was assigned the responsibility for the preparation of Action Papers, Arc Light studies, and implementing Rules of Engagement. This branch was also assigned the responsibility for the preparation and presentation of briefings pertaining to Arc Light Operations. The Current Operations Branch was assigned the responsibility for processing all Arc Light strike requests, monitoring daily activities on a 24-hour schedule and coordinating special requests from target nominating agencies. B-52 operations in Laos were terminated in accordance with the Laotian cease-fire agreement on 22 February 1973. Arc Light operations in Cambodia were continued on a limited basis at the request of FANK officials. 26

With the drawdown of U.S. Forces in Vietnam and the associated loss of Mobile Search Special (MSQ) Radar coverage in southern areas of Cambodia, Arc Light forces developed the Pave

* Arc Light was the nickname given to all B-52 operations in SEA.
Buff/Pave Phantom Pathfinder method of conducting strikes. This procedure consisted of a Long Range Airborne Navigation (LORAN) equipped B-52 or F-4 aircraft rendezvousing with strike cells and leading the cell to the target area for a LORAN release on the target. This procedure proved to be an effective and reliable method of delivery.

(U) Arc Light resources in SEA were responsive to special requests and maintained the capability to implement contingency plans at the direction of Higher Headquarters.27

Sensor Reseeding

As the cease-fire in Laos became imminent, CINCPAC directed the reseeding of all sensor strings in Laos. A major reseed effort was initiated, averaging three to four implant sorties per day, and all strings were reseeded by 17 February 1973. This extended the life expectancy of all Laotian sensor strings to mid-June 1973.28

Sensor Monitoring

Blue Orbit in Military Region (MR) I, RVN, had not been monitored since 9 January 1973 due to a lack of ABCCC C-130 aircraft. With the cease-fire in Laos the ABCCC Barrel Roll Orbit was discontinued and operations on Blue Orbit began on 22 February 1973.29

Reorganization of the Command and Control Division (J-3/DOC)

(U) On 11 March 1973 the Command and Control Division was
reorganized to establish the Air Defense Branch (DOCA), Standard-
ization/Evaluation Section (DOCS), and a centralized administrative
function. The change also included internal realignment of the
already existing Tactical Air Control Center (DOCB) and Target
Management Branch (DOCM). The change was the result of a DO re-
organization which deleted the FAC, Surveillance, and airlift
functions from DOC.

(U) The Standardization/Evaluation (Stan/Eval) Training
Branch was formed on 1 March 1973. Operating directly under the
Chief, Command and Control, this function insured that perform-
ance of battlestaff members remained at peak proficiency. The
office was also responsible for initial training of all new battle-
staff members upon their arrival at NKP. This training was recur-
ing in nature and also served as a cross-training syllabus later
in that controller's tour at NKP. Since the time of inception,
the Stan/Eval office insured that all battlestaff members were per-
forming in a highly proficient manner. This was accomplished by
position training and examination. One hundred percent of the
officer controllers and 97 percent of the NCO controllers tested
in March were either in a highly qualified, or qualified status.
In the training side of the Stan/Eval function, it was realized
that, an active interface program should exist between Blue Chip
and 7AF Airborne Command Control Squadron (ACCS). A flight
orientation program was adopted whereby all battlestaff members
would participate in one ABCCC flight orbit to witness first hand

The rest of the text is not visible due to scanning issues.
the problems encountered, and the ABCCC operation in action.  

Air Defense

The Air Defense Branch (J-3/DOCA) was formed on 11 March 1973 as a part of the Command and Control Division under the Assistant Chief of Staff, Operations (J-3). This new branch was born out of the reorganization of the Tactical Air Control and Surveillance Section. In establishing the Air Defense Branch, the following supporting functions of the Tactical Air Control and Surveillance Section were retained in the branch: Tactical Control Squadron (AC&W), Ground Surveillance Radio Relay Aircraft (RRA) (Luzon). The Forward Air Controllers and Igloo White (Sensor Surveillance) functions were realigned with the Current Operations Branch.  

On 23 March 1973 the Assistant Chief of Staff of the Air Defense Branch visited the DAO in Saigon to establish an OPR to fill the void created by the disestablishment of the Air Force Advisory Group which performed liaison between 7AF and the VNAF. The DAO Operations Plans Office was to be the OPR. A face to face visit was also made with the VNAF to discuss the progress and problems associated with the VNAF/RTAF Joint Integrated Air Defense Agreement. To implement the agreement and to make the program operational required additional cross border/cross tell lines. With the disestablishment of MACV, additional lines were turned over to the VNAF/RTAF. The lines were to be operational by the end of April 1973.  

* Lines of Communication that provide advance aircraft tracking information to adjacent sites.
Target Management

(U) During the first month of operations, the main events of interest were in two basic areas; the reintroduction of U.S. airpower into the Khmer Republic following the Lon Nol Government's unsuccessful attempt to achieve a permanent cessation of hostilities through a unilateral cease-fire declared on 29 January 1973, and the integration of the limitations imposed by the Laotian cease-fire, declared on 22 February 1973, into the overall air operations in SEA. 33

On 9 February 1973, the American Embassy, Phnom Penh, forwarded the first requests for limited U.S. air support from FANK to bolster selected key tactical positions receiving heavy enemy pressure. COMUSSAG, under the authorities granted by JCS, approved the limited use of U.S. air power with final approval authority for each individual request retained by COMUSSAG. 34

With the implementation of the Vietnam cease-fire, the great weight of 7AF air resources were directed against the military and logistics targets of Laos in an effort to exert maximum pressure on enemy military and logistics activities and thus expedite an early cease-fire agreement. The Laos cease-fire became effective on 22 February, and USSAG/7AF issued revised Air Operating Authorities and added a five nautical mile restricted area around the Laos border in Thailand and the Khmer Republic. This document also laid down the requirements and procedures for the reintroduction of U.S. airpower into Laos, should the need arise.
This procedure was first put to use on 23 February when the American Embassy forwarded a request for B-52 strikes in the Paksong area. With JCS approval, this request was implemented. Initially, following the Laos cease-fire, there was some confusion as to the authorities to ferry strike aircraft out of the theater, and for mission support strike aircraft headed for the Khmer from Northern Thailand and Guam. Though both JCS and USSAG/7AF authorities permitted overflight by authorized missions, in agreements concluded separately between COMUSSAG and the American Embassy, it was decided to withhold the overflight authorities to minimize U.S. tactical presence in Laos and preclude inadvertent ordnance expenditures into Laotian territory. Also, due to the increased military presence of the Pathet Lao/NVA forces in northeastern Laos, including the commitment of NVN Armed Forces elements to alert status, the Royal Laotian Government (RLG), through the American Embassy, Vietnam, requested that authorities be provided for U.S. air defense forces to counter possible offensive NVN MIG activities in Laotian air space. At the request of the RLG, JCS responded with the authorities on 10 March and these authorities were fully disseminated to the operational units by USSAG/7AF by 15 March 1973. Throughout the latter portion of February the enemy offensive in the Khmer Republic continued to gain momentum. The DAO, Phnom Penh, at the request of the Lon Nol Government, began to explore possibilities and methods necessary to increase the
effectiveness of U.S. airpower to counter the building offensive. During this same period, reconnaissance and intelligence sources revealed a substantial increase in enemy logistics activities in the northeastern regions of the Khmer Republic. In response to the mounting threat, both to the RVN and the Khmer Republic, JCS expanded the operating authorities to include interdiction of supply routes, storage areas and transhipment points throughout the Freedom Deal Region of the Khmer Republic, and increased the scope of air operations throughout the Khmer Republic to permit strikes against targets posing a potential threat to friendly forces and population centers. FANK, through the DAO, Phnom Penh, responded on 9 March by reestablishing the Category A/B prevalidated LOC structure in Freedom Deal. This provided blanket FANK validation of military targets in Freedom Deal, with the exception of a restricted area north of Stoeng Trang, as well as reconfirming the desire to return to the pre cease-fire operating procedures for Cambodia west. USSAG/7AF, in accordance with JCS directives of 27 January and 21 February, established the validation procedures in Cambodia west to include FANK and the American Embassy approval for each strike outside Freedom Deal prior to 7AF final review and approval. Also, targets not associated with Category A/B LOCs in Freedom Deal, though prevalidated by FANK and the American Embassy, would still require final review and approval by 7AF prior to strike. To insure strict adherence to the current authorities and applicable Rules of Engagement (ROE),
all strikes would be conducted with a FAC, with the exception of B-52 missions and approved all-weather strike systems. To expedite the validation process further, the approval authorities granted by JCS to COMUSSAG were further delegated at this time to 7AF/DO, or his appointed representative, for all targets in Cambodia west. For non-LOC associated targets in Freedom Deal, final approval authority was delegated to 7AF/Target Management Branch (DOCM). These new procedures and authorities were fully implemented and disseminated to the operational areas by 14 March. 37

On 12 March a strike mission deployed in Freedom Deal detected defensive radar emissions. Although the location of the installation could not be immediately determined, it became apparent that with the rapidly intensifying situation there would be a need for more than the provisions allowed under current defensive response authorities to adequately protect U.S. aircraft on authorized strike missions against radar guided AAA and surface-to-air missile threats. As a result COMUSSAG forwarded a request to JCS for expanded authorities to strike SAM/AAA threats upon activation of the radars. 38

Due to the large number of interdiction targets being developed in Freedom Deal, DOC reinstituted the Visual Reconnaissance strike list so as to record and disseminate these targets to all FACs to insure timely coverage. Also, this provided a uniform format and procedure for insuring that all targets of a non-fleet ing nature were reviewed for compliance with the ROE, and that any restrictions would be related predictably to the using units. In
an effort to further streamline the target processing/validation procedures in critical situations, DOCM implemented a procedure which would permit FANK/American Embassy and 7AF/DO the same approval authorities delegated to the Director, Air Battle Staff when tactical situations of a time-critical nature developed. This authority would only be issued for specific tactical operating areas for controlled time periods. COMUSSAG felt, however, that due to the sensitive nature of U.S. involvement in the Khmer Republic, full final control in the employment of U.S. airpower should be retained by this headquarters.\(^{39}\)

On 20 March a new authorities package was prepared for release, should U.S. re-entry into the air war in Laos become necessary as a result of continued Pathet Lao/NVN military efforts against the RLG positions. At that time the American Embassy was consulted in an effort to get input for updating the ROE pertaining to Laotian operations. As the military situation in the Khmer continued to become more critical, FANK requested several extensions of operating authority in an effort to ease restrictions on the employment of U.S. airpower in support of their operations. These included the prevalidation of several LOC systems outside Freedom Deal, the enlargement of the Freedom Deal area of operation, and the request for air strike and air fields both in and out of Freedom Deal. Alternations in the Freedom Deal boundaries, and prevalidations of LOCs outside of Freedom Deal could not be accomplished under the present authorities. However, air fields in
Freedom Deal and those outside of Freedom Deal which could pose a threat to friendly positions as logistics supply points for enemy operations were within current rules. During the latter part of March it became increasingly evident that enemy forces were using undamaged structures and structures of social and cultural value to conceal troops, supplies and firing positions.40

As a result of extreme enemy pressure on the Mekong River, and the resultant difficulties in getting vital food and supplies up the river to Phnom Penh, new measures in support of convoy operations were requested by FANK. These actions led to the establishment of the Special Mekong Air Sector (SMAS), and when implemented would provide extremely flexible and rapid response for air strikes in support of convoy movements and other associated river operations. The concept was to have an authorized representative of the FANK and American Embassy, Phnom Penh, on board an ABCCC orbiting the river area. When requests for strikes were received, the representatives were empowered to validate on behalf of their organizations. The ABCCC/Director of the Air Battle Staff had the delegated authority to approve the requests for 7AF, thus giving a nearly immediate response to the situation along the river. With pre-fragged FAC coverage of the sector and strike aircraft in refueling orbits overhead, it was an extremely responsive air support package. 41

Computer Operations

(U) The transfer of the computer operations branch from Tan
Son Nhat AB, RVN to NKP Royal Thai Air Force Base, Thailand was completed on 17 February 1973. Full operational capability was achieved as scheduled on 15 February.

(U) Several modifications to the computer system were necessary due to the discontinuance of certain component features used by Task Force Alpha, but not required by Hq USSAG. Primary among those was the removal of the International Business Machines (IBM) 2844, Auxiliary Storage Control Unit. Though estimated to be a 12-hour job by IBM, the system was down for 46 hours as unexpected problems were encountered. The backlog of jobs created during this time was eliminated within 24-hours. Remaining modifications were being scheduled as permitted by operational requirements and availability of parts.

(U) Autodin circuit outages scheduled by this branch during IBM preventive maintenance and systems software maintenance have caused circuit effectiveness to drop below the 98 percent required by AFCS regulations. Since these outages were necessary to insure continued smooth operation of both hardware and software, alternative solutions were under consideration, as of 31 March 1973. 42

Computer Programming

(U) Two new program systems were added to the 360/50 computer. The Bright Lights System, which was a file of Prisoner of War/Missing in Action information and crash sites, was maintained for the JCRC. Activity in this system was increasing
considerably since the cease-fire in South Vietnam. As a result of released Prisoner of War debriefings, numerous change requests were submitted by JCRC since the system was installed. The 37 programs that make up the Bright Lights System, were converted from the Intelligence Data Handling System and delivered without documentation in order to make them operational and available to the users at the earliest possible time. The second system that was installed shortly after the move to NKP was the Military Equipment Delivery Team Cambodia (MEDTC). MEDTC was basically a supply system utilized by the U.S. military personnel in Cambodia. It consisted of some 76 Common Business Oriented Language (COBOL) programs and was written and documented by the MACV Data Management Agency. A civilian programmer from MACV installed the system and taught the system to USSAG programmers. The system was run weekly with inputs from MEDTC and CINCPAC. The material was delivered to Cambodia by courier.

(U) The Special Customer Oriented Language (SPECOL) system was installed on the 360/65 computer in February. SPECOL consisted of a computer inquiry language designed to retrieve data from various forms of data bases. SEADAB and the Bright Lights files were defined to SPECOL and it was very useful for making specific ad hoc type retrievals from this data base.

Air Operations

During the period 15-22 February, air operations in Laos
concentrated on Close Air Support (CAS) around the large population centers of Saravane, Paksong and Savannakhet in Steel Tiger West. Armed interdiction against LOC in Steel Tiger East was limited. Daily frag order scheduled approximately 280 strike sorties which included 88 Navy and 12 Marine sorties. OV-10 FACs averaged 32 sorties per day. Armed interdiction of LOC in Barrel Roll continued. Daily allocation totaled approximately 110 sorties including 12 Marine and 33 F-111 sorties. OV-10's flew six daily sorties in this area. Special operations included four A-7 and four OV-10 ground alert sorties scheduled in support of Khmer, (See Figure 19). On 21 February an increased effort into Laos was fragged in anticipation of an enemy push prior to the Laotian cease-fire. Strike sorties in Steel Tiger numbered 304 with 132 allocated to Barrel Roll Operations (See Figure 20).

Following the Laotian cease-fire, strike air operations in that country terminated. Navy and Marine support of sea air operations also ended. Special operations ground alert was fragged for approximately 30 sorties per day in anticipation of requested support from the Laotian government and 20 alert sorties in support of Khmer. Strike flights were allocated against Khmer hostile operations on a limited basis (See Figure 21). Increased support for friendly Khmer forces was fragged on 12 March. Strike sorties, including 10 F-111 sorties, numbered 80. This increased to 108 sorties the following day with the addition including 20
<table>
<thead>
<tr>
<th>AS OF</th>
<th>HOTEL</th>
<th>DAY/NIGHT BREAKOUT</th>
<th>FRAG DAY: 16 Feb</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE/ AIRCRAFT</td>
<td>STEEL TIGER</td>
<td>BARREL ROLL</td>
<td>KIIMER</td>
</tr>
<tr>
<td></td>
<td>DAY</td>
<td>NITE</td>
<td>DAY</td>
</tr>
<tr>
<td>UBN F-4</td>
<td>42</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>KRT F-4</td>
<td>18</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>UDN F-4</td>
<td>14</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>TKL F-111</td>
<td>14</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>KRT A-7</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>SUB TOTAL</td>
<td>98</td>
<td>57</td>
<td>65</td>
</tr>
<tr>
<td>USNV</td>
<td>80</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>MAG 15</td>
<td>12</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>UBN AC-130</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SUB TOTAL</td>
<td>190</td>
<td>65</td>
<td>93</td>
</tr>
<tr>
<td>B-52</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>KRT EB-56</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT WILD WEASEL</td>
<td>4</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>UBN KT-4</td>
<td>10</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>KRT</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>UDN</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>OV-10</td>
<td>23</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OV-10P</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>242</td>
<td>71</td>
<td>117</td>
</tr>
<tr>
<td>BASE/ AIRCRAFT</td>
<td>STEEL TIGER</td>
<td>DAILY</td>
<td>NITE</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDN F-4</td>
<td>37</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>KRT F-4</td>
<td>18</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>UDN F-4</td>
<td>16</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>TNL F-111</td>
<td>11</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>KRT A-7</td>
<td>43</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>VBN A-7</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUB TOTAL</td>
<td>131</td>
<td>72</td>
<td>75</td>
</tr>
<tr>
<td>USN A-9</td>
<td>94</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MAG 15</td>
<td>17</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>UBN AC-130</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SUB TOTAL</td>
<td>237</td>
<td>82</td>
<td>91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BASE/ AIRCRAFT</th>
<th>STEEL TIGER</th>
<th>DAILY</th>
<th>NITE</th>
<th>DAILY</th>
<th>NITE</th>
<th>KIMER</th>
<th>DAILY</th>
<th>NITE</th>
<th>OTHER</th>
<th>DAILY</th>
<th>NITE</th>
<th>TOTAL</th>
<th>OVER</th>
<th>ALL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT E3-66</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT WILD WEASEL</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDN RF-4</td>
<td>10</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>18</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT E3-66</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT WILD WEASEL</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDN RF-4</td>
<td>10</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>18</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ME-47</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>ALET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>41</td>
<td>41</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OV-10</td>
<td>34</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>41</td>
<td>41</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OV-10P</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>1</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>292</td>
<td>84</td>
<td>108</td>
<td>44</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>415</td>
<td>128</td>
<td>543</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASE</td>
<td>POSS</td>
<td>FRAG RATE</td>
<td>SCR</td>
<td>TINY TIM</td>
<td>SAR</td>
<td>AD</td>
<td>ALERT</td>
<td>STRK</td>
<td>ST FRAG</td>
<td>BR FRAG</td>
<td>GR FRA</td>
<td>ALERT OTHER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td>-----------</td>
<td>-----</td>
<td>----------</td>
<td>-----</td>
<td>----</td>
<td>-------</td>
<td>------</td>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>-----------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBH F-4</td>
<td>104</td>
<td>.14</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KNT F-4</td>
<td>26</td>
<td>.08</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDN F-4</td>
<td>95</td>
<td>.11</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKL F-111</td>
<td>45</td>
<td>.07</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KNT A-7</td>
<td>67</td>
<td>.21</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAF TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>6</td>
<td>4</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**USAF**

| MAG 15    |      |           |     | 13      | .23 | 3  |       |      |         |         |        |           |
| UBH AC-130|      |           |     |         |     |    |       |      |         |         |        |           |
| SUB TOTAL |      |           |     | 47      | 6   | 4  | 28    |      |         |         |        | 12        |

| EC-47     | 19   | .53       | 10  |         |     |    |       |      | 4       | 2       | .25     | 4         |
| B-52      |      |           |     |         |     |    |       |      |         |         |        |           |
| KNT EB-66 | 20   | .10       | 2   |         |     |    |       |      |         |         |        | 1         |
| KNT WILD-WEAS | | | | | | | | | | | | |
| UDN RF-4  | 22   | .82       | 18  |         |     |    | 4     |      | 10      |         |        | 1         |
| OH-21     | 4    | .50       | 2   |         |     |    |       |      | 2       |         |        |           |

(SECRET WHEN FILLED IN)

| OV-10    | 37   | .11       | 4   |         |     |    |       |      | 4       |         |        | 4         |
| OV-10P   | 12   | .17       | 2   |         |     |    |       |      |         |         |        | 2         |
F-111 strikes, and to 205 sorties on 16 March (See Figure 22). Ground alert continued to be fragged at a daily approximate of 50 sorties with 15/30 minute response time. Khmer operations were fragged for armed interdiction in Freedom Deal, CAS F-111 strikes (beacon offset), special Visual reconnaissance missions by OV-10s, and Mekong River convoy escort. The number of sorties fragged into Khmer leveled at 176 by 31 March (See Figure 23). Reconnaissance operations continued to be fragged throughout SEA. EB-66 and F-105 Iron Hand* coverage of strikes into suspected SA-2 operating areas were normally fragged.

On 16 March, NKP CH-53 helicopters began special operations in Thailand to include Royal Thai Air Force Base defense, civic action and other special missions. On 19 March, Ubon based F-4s started Pathfinder LORAN missions in support of B-52 strikes in Cambodia.

Airlift

(U) On 15 March 1973, as the Airlift Section of the Command and Control Branch of Air Operations Division, Directorate of Operations, MACV/7AF, (MACV DO-227) this agency was responsible for management of tactical airlift in RVN, as well as OPR for

---

* SAM and radar-controlled AAA suppression flown by specially equipped F-105F aircraft.

† Two or more aircraft using lead aircraft's LORAN for navigation.
<table>
<thead>
<tr>
<th>BASE A/C</th>
<th>POSS</th>
<th>RATE</th>
<th>TOTAL</th>
<th>ALERT</th>
<th>STRK</th>
<th>T.TEM</th>
<th>OTHER</th>
<th>ST</th>
<th>ER</th>
<th>KR</th>
<th>SVN</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBN F-4</td>
<td>105</td>
<td>.66</td>
<td>69</td>
<td>11</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(BUSC)</td>
</tr>
<tr>
<td>UDN F-4</td>
<td>100</td>
<td>.44</td>
<td>44</td>
<td>10</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(G:AM)</td>
</tr>
<tr>
<td>KRT F-4</td>
<td>24</td>
<td>.75</td>
<td>18</td>
<td>2</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(G:AFR)</td>
</tr>
<tr>
<td>KRT A-7</td>
<td>27</td>
<td>.74</td>
<td>20</td>
<td>6</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>KRT A-7</td>
<td>40</td>
<td>.55</td>
<td>22</td>
<td>8</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>TKL F-111</td>
<td>45</td>
<td>.73</td>
<td>33</td>
<td>-3</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>UBN AC-130</td>
<td>15</td>
<td>.80</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>SUB TOT</td>
<td></td>
<td></td>
<td>164</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F 4</td>
<td>24</td>
<td>.50</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>40</td>
<td>174</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>KRT F-15</td>
<td>24</td>
<td>.46</td>
<td>11</td>
<td>8</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>KRT X-6</td>
<td>22</td>
<td>.23</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>KKP X-7</td>
<td>16</td>
<td>.55</td>
<td>10</td>
<td>3</td>
<td>(2)</td>
<td>(2)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>U-2</td>
<td>4</td>
<td>.75</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>UDN RF-1</td>
<td>20</td>
<td>.90</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>KKP OV 10</td>
<td>1</td>
<td>.17</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>UBN G-9</td>
<td>3/24</td>
<td>.15</td>
<td>31</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
<tr>
<td>KKP CH-53</td>
<td>11</td>
<td>.27</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(AF)</td>
</tr>
</tbody>
</table>
related staff matters. The fragmentary order for RVN airlift was prepared daily in response to requirements received from J-4 and coordinated with the 374 Tactical Airlift Wing (TAW) Forward Operating Locations (FOLs) which were established at Takhli Royal Thai Air Force Base and U-Tapao Airfield, Thailand, during Phase III of the RVN drawdown.

(U) During the period 15 February through 22 March 1973, a total of 9,212 tons, including 42,230 passengers were airlifted by C-130's under MACV DO-227 control. Included in this tonnage were 66 airdrop sorties delivering 998 tons of ammunition and rations to besieged friendly positions in Cambodia. The most significant accomplishment was the airlift of 26,508 Provisional Republican Government and North Vietnamese Army POWs from Binh Thuy, Bien Hoa, An Thoi, and Con Son for repatriation. Offload stations, as requested by the Provisional Revolutionary Government (Viet Cong) and North Vietnamese Army, were Camp Evans, Quang Ngai, Loc Ninh, Tay Ninh West, Bien Hoa, and Phu Cat. A total of 331 productive sorties were flown, including those required to return the 7,420 Quan Canh guards which accompanied the POWs.

(U) On 22 March 1973, operational control of airlift forces was passed to PACAF through the Airlift Control Center at U-Tapao Airfield, Thailand. Personnel within MACV DO-227 physically transferred to NKP between 18 and 28 March 1973, and became

* The VNAF and ARVN Military Police.
members of the Operations Support Branch, USSAG/7AF. This agency continued as OPR for staff matters pertaining to tactical airlift within SEA, and assumed staff responsibility for other areas of operational support, to include rotary wing airlift.

F-111 Operations in Cambodia

On 17 March 1973, high level interest was generated concerning the employment of F-111 bombing utilizing AW/PPN-18 radar beacons in the Khmer. As a result of its unique capabilities, the F-111 could be utilized using the radar delivery mode. The concept of operations included employment against pre-planned or immediate divert targets. Pre-planned targets were generated from all intelligence sources and were forwarded through the American Embassy, Phnom Penh and FANK Headquarters to 7AF for final approval. Targets were not struck if friendly forces were closer than 1000 meters (Bombs) or 3000 meters (Cluster Bomb Unit). After approval, the 474th TFW computed the necessary information utilizing the appropriate beacon and computed radar prediction data so the strike could be accomplished even if the beacon could not be acquired on radar. Immediate targets were considered to be of a fleeting or high priority nature and were generated from any intelligence source. They were normally forwarded by a ground commander for immediate air strikes. Target position information was computed utilizing the appropriate beacon and was passed to the aircrews when they checked in with area control at Phnom Penh. On 17 March two beacons were already in place in Cambodia. They were located
Surveillance (Comfy Gator), Operations Security (OPSEC) and Tactical Reconnaissance programs. 47

During the period 12-17 February, all sensors in Steel Tiger were reseeded, extending the life of that field to mid-June. The Steel Tiger sensors were located in the major input passes (Nape, Mu Gia, Ban Karai and Ban Raving) along the NVN-Laos border and along the throughput routes running from Laos into RVN.MR-1. On 25 March, a COMUSSAG message advised CINCPAC that sensor surveillance of the Demilitarized Zone/MR-1 area would be discontinued unless otherwise directed. The build-up of enemy SAM/AAA positions in MR-1 precluded the use of an effective data relay orbit location and presented unacceptable risks to sensor implant aircraft. CINCPAC concurred with USSAG proposal on 29 March. 48

On 28 February CINCPACAF requested that 7AF develop a Comfy Gator route in Thailand in case Laotian air operations authorities were curtailed. A USAF Security Service proposed route was included in the PACAF message. On 14 March 1973, a 7AF message requested comments from PACAF and all interested agencies on proposed route. The 7AF proposed route was located along the eastern Thailand border from a point northeast of Vientiane to a point northeast of Ubon. 49

Tactical Reconnaissance tasking increased to 18 fragged lines per day following the cease-fire in Vietnam. Intensified interdiction efforts in Steel Tiger, and later, in the Khmer Republic, necessitated recurring coverage of lines of communications and traditional base camp areas used by the communist force.
As the threat in northern RVN increased, tactical reconnaissance operation was restricted in that area. During March, following extensive AAA battle damage to one RF-4C aircraft operating in Steel Tiger, the use of an unarmed fighter escort for reconnaissance sorties in Laos was initiated.

Photo objectives in Laos stressed logistics nets and armor searches. In Khmer, area coverage was stressed in the eastern and southern regions and gradually shifted to increase Arc Light, F-111 and Pave Phantom Bomb Damage Assessment. Some area cover photography was accomplished to update the data base of pre cease-fire imagery. The recently deployed KA-91 medium altitude panoramic cameras facilitated the accomplishment of the vast amount of area cover work, and was also used extensively on lines of communication. Four sorties per day employed KS-72 cameras, mounted in the split vertical configuration, as primary sensors and were very effective in monitoring traffic throughout Laos.
FOOTNOTES

CHAPTER III


2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.

12. Ibid.

13. Ibid.

14. Ibid.

15. Ibid.

16. Ibid.

17. Ibid.

18. Ibid.

19. Ibid.

20. Ibid.

21. Ibid.

22. Ibid.
23. Ibid.
24. Ibid.
25. Ibid.
26. Ibid.
27. Ibid.
28. Ibid.
29. Ibid.
30. Ibid.
31. Ibid.
32. Ibid.
33. Ibid.
34. Ibid.
35. Ibid.
36. Ibid.
37. Ibid.
38. Ibid.
39. Ibid.
40. Ibid.
41. Ibid.
42. Ibid.
43. Ibid.
44. Ibid.
45. Ibid.
46. Ibid.
47. Ibid.
48. Ibid.

(This page is unclassified)
49. Ibid.
50. Ibid.
(U) The USSAG/7AF J-4 section was initially developed by the MACV, Directorate of Logistics (DL) in conjunction with overall planning by MACV staff agencies in response to directives by COMUSMACV. On 29 January 1973 Lt Colonel James Payne moved to NKP to act as MACVDL advance representative to coordinate facilities and equipment needs of the J-4 section and act as the J-4 contact on site. On 4 February 1973 Brigadier General Stan L. McClellan, the Chief of Staff, United States Army, Republic of Vietnam (USARV)/MACV Support Command (SUPCOM), was nominated by COMUSMACV to assume responsibilities as Assistant Chief of Staff (ACS) J-4 upon his release by Commander USARV/MACV SUPCOM. General McClellan subsequently nominated Colonel Sherman Weisinger and Major Benjamin Covington as Deputy ACS and Executive Officer respectively, and assumed responsibility for organizing and establishing the J-4 section. During the period 5-14 February actions were taken to identify, brief, and arrange for movement of personnel and equipment from RVN to NKP. As pressing duties in RVN prevented either General McClellan or Colonel Weisinger from moving until a later date, General McClellan directed that Colonel Frank A. Matthews, then Assistant Deputy Chief of Staff, Logistics (DCSLOG), USARV/MACV SUPCOM move to NKP to act on his behalf until his arrival.

(U) On 14 February Colonel Matthews accompanied by Major
Covington moved to NKP to assume duties as Acting ACS J-4. On 15 February 1973 the J-4 section was officially activated with 11 of 31 spaces filled. During the period 15 February - 2 March, the section concerned itself with identifying problem areas, conducting liaison visits to associated headquarters and agencies, developing and amplifying the logistics mission and functions statements, and coordinating major actions.

(U) On 2 March 1973 General McClellan arrived at NKP and assumed direct control of the J-4 staff. On 11 March Colonel Weisinger arrived at NKP and assumed responsibilities as Deputy ACS. As initial guidance, General McClellan outlined the following areas of concentration to the J-4 staff:

--Continued analysis and development of structure and functions of the J-4 section.

--Comprehensive and rapid establishment of contacts with other headquarters and agencies with whom the J-4 would or might interface.

--Development of detailed input for all USSAG plans and operations.

--Maximum advice and assistance to JCRC headquarters in the development of their mission capable posture.

--Rapid analysis and development of external input necessary to apply logistics data to ongoing operations and contingency plans.

Logistics Management Division Activities

(U) The USSAG/7AF Supply and Services Division, ACS Logistics
was formed on 10 February 1973 with the arrival of Lt. Col. William R. Thomas and MSgt Donald G. Kohl from Tan Son Nhut AB, RVN. The Division commenced operations on 15 February and began monitoring aircraft maintenance status, petroleum and air-munitions status and special related projects of command interest for all U.S. Forces committed to USSAG/7AF support. Within the next month, Maj. Lawrence H. Skelton, Maj. Norman G. Harvey, Maj. Sterling P. Clark, Capt. John E. Holverson and Capt. Klaus D. Reichelt joined the Supply and Services Division.

(U) During late March 1973, the Supply and Services Division was redesignated the Logistics Management Division to more accurately describe the functions performed. During this reporting period, Major Harvey attended a CINCPAC munitions conference in Hawaii while enroute to USSAG. The Logistics Management Division was also represented at this meeting by Major Robert McCaughan of the Plans and Programs Division.2

Plans and Programs Division

(U) The Plans and Programs Division, ACS Logistics, Hq USSAG/7AF, was organized to provide staff supervision for all matters pertaining to Military Assistance Service Funded (MASF) and Military Assistance Programs (MAP) in support of USSAG/7AF plans and operations in SEA. The division provided staff supervision for internal J-4 budgetary and fiscal matters. It also developed logistic requirements, directives, and plans in support of USSAG/7AF programs and contingency plans. The Division

(This page is unclassified)
established direct liaison with RVN DAO in consonance with current contingency plans and reviews and monitors logistics reports and actions.

(U) Major activities of the Division were the development of Logistics Annexes for Operations Plan (OPLAN) J-0001 and OPLAN Tennis Racket, development of Inter Service Support Agreement (ISSA) for Hq USSAG and JCRC, development of a J-4 orientation briefing, providing U-2I aircraft support for JCRC, and effecting liaison and establishing communications with the DAO Saigon, RVN.3

Proposed Changes to the USSAG J-4 JTD

(U) As Hq USSAG became operational and specific missions and functions began to jell, it became apparent that the J-4 section was not properly staffed and organized to accomplish its assigned tasks. The J-4 conducted a qualitative and quantitative review of its organization with respect to current and projected missions. The prime areas of this evaluation were adequacy of current authorization, adequacy of current structure, and adequacy of titles, codes, grades, and remarks. The J-4 study revealed the JTD failed to provide a capability for either maintenance monitoring or a classified documents control center and distribution point. Other omissions noted were the inconsistency in the "Remarks" column, lack of coincidence in grade structure, and total absence of flexibility to handle new programs which were continually surfacing. A thorough review was to be accomplished on 6 April 1973 to develop a J-4 organization structured to best meet current and
projected operational requirements for the ACS Logistic Staff Section.

**RU-21 Support for JCRC**

JCRC had an operational requirement for three RU-21 aircraft to support its mission. CINCPAC approved this support on a reimbursable basis and tasked the United States Army Pacific (USAR PAC) to organize a separate aviation detachment. CINCPAC further directed USSAG and USAR PAC to develop basing and command relationships without addition to the JTD. COMUSSAG endorsed the Commander, JCRC request to station three RU-21 aircraft at NKP under operational control of JCRC and requested conceptual concurrence of USAR PAC. USSAG further highlighted to USAR PAC the urgency of RU-21 support for JCRC and solicited timely concurrence and interim RU-21 support on a TDY basis until the essential crews, pilots, copilots, and crew chiefs could be assigned on a permanent basis. The USAR PAC reply was still pending as of 31 March 1973.

**Transportation Division, J-4, Principal Functions and Activities**

(U) The Transportation Division became an active part of the J-4 Staff on 15 February 1973. The mission of the transportation division was to provide the ACS, J-4 a staff for monitoring, developing, and assisting in transportation matters required in support of the USSAG mission. This included development of operations plans, contingency plans, and other USSAG transportation requirements.
(U) During the first eight weeks of operation the division provided input to various plans, policy, and function statements generated by the ACS, J-4 staff. Briefings were prepared and presented to the ACS, J-4 and the command group covering the transportation environment in the Western Pacific Area.

RVNAF Sea Transportation Requirements After U.S. Military Redeployment

(U) Subsequent to the cease-fire agreement, Military Sealift Command (MSC) operated Landing Ship, Tanks (LSTs) were scheduled for redeployment from RVN waters to other Western Pacific Areas. These LSTs were utilized for inter-RVN movement of cargo in support of United States and Republic of Vietnam Armed Forces. In order to determine the impact of the LST redeployment on the Republic of Vietnam Armed Forces, LCDR Jaquith traveled to Saigon and met with cognizant Army of the Republic of Vietnam (ARVN), MACDL-42, and MSC representatives. It was determined that maximum utilization of Vietnamese Navy (VNN) and ARVN owned transportation assets would be sufficient to offset the loss of support from MSC-operated LSTs assuming a relatively calm post-war environment. Should the anticipated lessening of military activities not materialize, various alternatives were discussed. Among these, utilization of in-country commercial transportation assets under Government of Vietnam (GVN) contracts was considered the most feasible way to augment RVNAF transportation capability. The RVNAF transportation system was being continually monitored to ensure adequacy. 12
RVNAF Airlift Capabilities After U.S. Military Redeployments

On 23 March 1973, the U.S. Air Force C-130 aircraft assigned to SEA were placed under the operational control of the Airlift Control Center-Thailand (ALCC-Thai) at U-Tapao Royal Thai Air Force Base, Thailand. Pacific Transportation Management Agency-Thailand (PATMA-Thai), also located at U-Tapao, became the single clearing authority for all C-130 airlift requests within SEA. Previously, the U.S. C-130 airlift requests for RVN were processed and fragged by agencies operating at MACV. The cease-fire agreement in RVN brought about a proposed C-130 Force Structure reduction. Major Ward was sent to visit PATMA-Thai to coordinate on the number of C-130 aircraft required to support SEA. The 90-day airlift requirements forecast for intra-RVN service called for one C-130 weekly to transport engines and propellers between Ubon Royal Thai Air Force Base and Tan Son Nhut Air Base, RVN. With no intra-RVN U.S. Air Force C-130 airlift programmed and the low forecast requirements in RVN, it was agreed that the Tactical Air Command's rotational squadron's (773 Tactical Airlift Squadron) return to CONUS would not degrade the existing SEA airlift capabilities. The VNAF airlift of cargo from the Air Logistics Command (ALC) depot at Bien Hoa was being monitored by the transportation division on a daily basis. For this reporting period there was an average daily backlog of 92,212 pounds in the Military Air Transportation Terminal (MATT) at Bien Hoa. An average of 37,748 pounds of cargo was being airlifted from the Bien Hoa MATT daily. U.S. Air Force C-130s flew missions eight days in
support of VNAF with an average of 30,609 pounds airlifted each day. 13

Engineer Division, J-4, Principal Functions and Activities

(U) The Engineer Division was formed as a part of the J-4 Staff, Hq USSAG/7AF for the purpose of providing the ACS, J-4 an arm to insure a capability to monitor, assess and develop engineer support requirements in accordance with new or modified programs, current operations and contingency plans in support of Hq USSAG/7AF. The task of gathering engineer oriented information commenced on 10 February 1973. Liaison visits were made to subordinate headquarters to make contact and establish relationships. Information was collected from all available sources as regards the engineer environment and the repository of base data was created. During the first eight weeks, the division provided input to various plans, policy and function statements generated by the ACS, J-4 Staff; the most significant of these being Appendix 5 to Annex D, Base Development Plan, of OPLAN J-0001. Briefings were prepared and presented to the ACS, J-4 and the command group covering the engineer environment in Thailand, principal functions and current actions of the Engineer Division. 14

2. Ibid.

3. Ibid.

4. Ltr (U), USSAG Asst Chief of Staff, J-4, to J-4 Staff Sections, 23 Mar 73, Subj: Reorganization of USSAG, J-4 (U).


7. Msg (U), CINCPAC to USSAG, 242243Z Mar 73, Subj: Airborne Radio Relay Requirements for JCRC (U).

8. Ltr (U), JCRC to USSAG, 29 Mar 73, Subj: Basing of U-21 Aircraft (U); Ltr (U), USSAG to JCRC, 4 Apr 73, Subj: Basing of U-21 Aircraft (U); Msg (C), USSAG to USARPAC, 050205Z Apr 73, Subj: U-21 Aircraft Support for JCRC (U), GDS-1979.


11. Ibid.

12. Ibid.

13. Ibid.

14. Ibid.
All communications required to support the new USSAG/7AF Headquarters were operational on 15 February 1973. During this reporting period, numerous problems were experienced with the Automatic Secure Voice Communications (AUTOSEVOCOM) service provided to the USSAG Headquarters. This degraded service was due to marginal equipment performance, inexperienced operators, and poor quality long-haul circuits. Customer familiarization with the manual operation was also a contributing factor.

The problem of inexperienced operators was resolved by expediting the reassignment of two well qualified operators from Da Nang, RVN. In addition, Army personnel from RVN provided TDY assistance for a period of two weeks. During the period 5 through 10 March, a special AFCS technical evaluation team arrived to identify the system problems being experienced with the NKP AUTOSEVOCOM operation. As a result of their visit, all marginal equipment was identified and brought to peak operating condition. Several sub-standard long-haul circuits were also identified. These circuits were re-engineered to insure optimum performance. A special customer service desk was also established for selected AUTOSEVOCOM customers. All of the above actions resulted in a marked improvement in the service provided to the USSAG AUTOSEVOCOM customer.

USSAG HOI's

(U) USSAG HOI's were prepared covering the Emergency Action
Console (EAC) and Address Indicating Groups (AIGs). These documents were being staffed and were to be published in April 1973.2

Communications-Electronics Annex to USSAG Operations Plan

(U) In early March 1973, a Communications-Electronics (C-E) Annex to the proposed USSAG Operations Plan, J0001, entitled "Talon Eagle" was written. This was the first planning document written by the C-E Staff. The annex prescribed C-E support for U.S. Air and Naval combat activities in support of U.S. interests throughout SEA. The annex (in draft) was coordinated with the C-E Division USDAO, Saigon, RVN, by the Deputy Assistant Chief of Staff, C-E on 28 March 1973.3

JCRC Communications Support

(U) All JCRC communications requirements finalized by 31 March were reviewed by COMUSSAG/J-6 for validity, interface with existing systems, and practicality. JCRC requirements for host and base support were presented to the base Communications-Electronics-Meteorological Board (CEMB), for host validation. Pacific Communications Area engineering and installation assistance was authorized at COMUSSAG/J-6 request, to assist JCRC finalization of radio requirements, to select an antenna site, and to ascertain compatibility within the JCRC radio net structure. JCRC call sign and frequency requests were validated by COMUSSAG/J-6 and assigned by COMUSMACVTHAI during this period. COMUSSAG assistance resulted in a temporary loan to JCRC of two AN/MRC-108 radio sets from Det 1, 56th Combat Support Group at Udorn for a field

(This page is unclassified)
which were in the line of sight between the antenna and low elevation satellites. Cost estimates were developed and CINCPAC approval sought for this upgrade. In the interim, mid-March, USSAG and JCS determined a requirement existed to develop a Compass Link receive capability at NKP. This could not be accomplished using the AN/TSC-54; therefore, the requirement for an AN/MSC-46 at NKP again became evident. On 29 March 1973 JCS tasked the Defense Communications Agency (DCA) to develop the systems solution to provide a Compass Link receive capability in SEA. DCA was to report their findings and recommendations by 18 April 1973.

Blue Chip Communications

(U) Two electronic positions, dedicated to the four RVN Military Regions were deleted on 24 March. This resulted in two positions being available to support JCRC. The communications boxes were rewired to satisfy the JCRC requirements. These actions were completed on 30 March 1973. A hot line to the Udorn remote radio site was added to the Blue Chip communications center to facilitate coordination in working the ABCCC secure teletype line. This was completed on 4 March 1973.

SACADVON Communications

(U) A non-secure hotline was added between SACADVON and Det 15, 1st Combat Evaluation Group at NKP. At the same time, Det 15 was removed from the circuit between SACADVON and Det 27, 1st Combat Evaluation Group, NKP, and a separate hotline was established between Det 15 and Det 27. This resulted in better
coordination between the above sites. Both actions were completed by 28 February 1973.
FOOTNOTES

CHAPTER V

1. Rpt (S), USSAG/7AF (J-6), 15 Feb - 31 Mar 73, Subj: Historical Report (U), GDS-31 Dec 1981.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.
Organization

(U) The Joint Casualty Resolution Center (JCRC) was established on 23 January 1973 as a Joint Task Force by the Commander In Chief, Pacific (CINCPAC). The unit would be under the operational command of the COMUSSAG, and was to operate under a JCS approved mission and JTD.

(U) The JCRC was organized under the command of Brig. Gen. Robert C. Kingston, U.S. Army. General Kingston has spent considerable time in SEA, mostly in command assignments. Prior to establishing the JCRC, he was Deputy Commander of the Second Regional Assistance Command, Military Region II, in Vietnam.

(U) The JCRC was an outgrowth of service efforts to identify, document, and maintain records of personnel known and suspected to be Missing In Action (MIA) and Prisoners Of War (POW). This activity was an on-going function since combat operations began in SEA. These records were centrally maintained by the Joint Personnel Recovery Center (JPRC) in Saigon, RVN, beginning in 1966. When the JCRC was organized in Saigon on 23 January 1973, the records of the JPRC were turned over to the new organization. On 15 February 1973, the JCRC relocated to Nakhon Phanom Royal Thai Air Force Base, Thailand. This base is centrally located to all the areas in which JCRC was to operate. Although an advance party moved as early as 28 January 1973, the headquarters became operational at NKP on
15 February 1973. The small advance party had coordinated space, support, transportation, and other initial requirements.

Mission

(U) The mission of the JCRC was to resolve the status of the U.S. MIA and Bodies Not Recovered (BNR) personnel through the conduct of operations to locate and investigate crash and grave sites and recover remains, as appropriate, throughout SEA. The critical phrase in this mission was "through the conduct of operations." The entire operation was to be humanitarian in nature and was specifically tailored to facilitate the field operations and to achieve maximum professional accomplishments.

(U) To understand the scope of the JCRC mission, the workload could be expressed in terms of individuals and in the numbers of crash sites which would have to be located and inspected. As of 31 March 1973, just under 1300 men were carried as missing in action and just over an additional 1100 had been declared dead by their service, although remains were not recovered. The specific figures constantly changed as new information became available or the services changed the status of their individuals. These approximately 2400 Americans were in the MIA/BNR categories throughout SEA: i.e., South Vietnam, North Vietnam, Laos, and Cambodia. Of the 2400, approximately 1000 were Air Force personnel; 700 Army, 400 Navy, 300 Marine Corps, and the remainder were civilians. Most of the missing in action were from the Air Force, with the majority of these missing over North Vietnam. Most of
those killed, but remains not recovered, were from the Army, the majority of which were in South Vietnam.

(U) The other means of explaining the task ahead was by the number of crash sites in which there were unaccounted for personnel, since 78 percent were the result of air crashes. There were over 1000 such crash sites involving over 50 different types and models of aircraft. The number varied from nearly 400 in North Vietnam to less than 20 in Cambodia. These crash sites were on mountains, in jungles, and the many other types of rugged terrain in SEA. Approximately 150 of the crashes were at sea. The task would become even more complex since over 90 percent were in areas under control of the ex-belligerents. 5 (See Figure 24).

(U) In planning for field operations, JCRC used the following assumptions:

---The Governments of Vietnam, Cambodia, and Laos would cooperate with the U.S. by conducting or participating in casualty resolution operations.

---The cease-fire agreement would include military ceilings in the RVN, Laos, and Cambodia, but JCRC operations would be exempt from these limitations.

---Cease-fire agreement violation risks and casualty risks for U.S. personnel would be minimized.

---Conditions for coordination with enemy forces would be provided under the terms of the cease-fire agreement.

---Liaison officers would coordinate in-country activities through CINCPAC Senior Military Representatives or American
Embassies.

--- JCRC activities would be authorized in North Vietnam.
--- JCRC teams would be authorized access to all pertinent areas of SEA to conduct casualty resolution operations.

(U) To accomplish the casualty resolution mission, the JCRC would have to have the authority to operate in the countries where MIA and BNR personnel are located and have full cooperation of each of those governments. Article 8B of the text of the "Agreement on Ending the War and Restoring Peace In Vietnam" stated that:

"The parties shall help each other to get information about those military personnel and foreign civilians of the parties missing in action, to determine the location and take care of the graves of the dead so as to facilitate the exhumation and repatriation of the remains, and to take any such other measures as may be required to get information about those still considered missing in action..."

(U) General Kingston was to be assisted by liaison officers who hopefully would be allowed to locate in Hanoi, Vientiane, and Phnom Penh. In Saigon, the JCRC maintained an officer as a point of contact with the DAO as a means of providing direct communications with the four party Joint Military Team.

Functions

(U) The JCRC was organized under a dual deputy system. The Deputy Commander for Staff Operations was responsible for the Staff Planning and Coordination. The Deputy Commander for Field Operations supervised the field units. It was also felt that additional
comment was warranted on the functions of four of the staff elements. (See Figure 25).

--The Public Affairs Officer was to provide all available information on JCRC activities to the Bangkok Information Office headed by the PACOM Public Affairs Officer for SEA. One officer in that office was designated as a casualty resolution point of contact and he was in constant contact with the JCRC on all casualty resolution matters.

--The Casualty Data Division assembled, correlated, and analyzed available information on personnel who were missing in and around crash and burial sites. The functions of this division included data analysis, photo interpretation of aerial photos of crash sites, development of crash and grave sites in which JCRC operated, and maintaining casualty records of those who were MIA at one time or another during the conflict.

--The Operations Division was charged with the normal functions of operations, plans, and communications. It also had a Public Communications Branch which provided staff assistance in the development of all-source media in the host countries in an effort to obtain additional information concerning crash and burial sites.9

(U) The major subordinate elements involved in field operations consisted of two control teams, one oriented toward operations in Vietnam and one toward Laos and Cambodia. These control teams provided command and control to casualty resolution field teams of five men each, and were to have operational command of
all augmentation and specialists needed to accomplish the mission. The launch team had the job of launching, supporting, and extracting the field teams and provided for requisite air, communications, and logistics support.

(U) The field teams, composed mainly of Special Forces qualified U.S. Army troops, constituted nearly half of the JCRC strength which numbered approximately 150. The skills acquired by the special forces training was of paramount importance in this humanitarian operation since it was anticipated that the field teams would operate in the extremely rugged and difficult terrain of SEA for prolonged periods. Their training also assisted in working harmoniously with the indigenous people of the various countries. Each of the casualty resolution teams consisted of an officer, a radio operator, an interrogator, a medic, and a general duty assistant to the officer in charge. The field teams would be augmented as required, by Air Force crash investigators, ordnance demolition experts to disarm unexpended ordnance and booby traps near crash sites, and by indigenous forces who were to assist in the search and on-site operations. The JCRC possessed 11 organic field teams with a possible augmentation of 10 more from the 1st Special Forces Group on Okinawa, and 16 teams from U.S. Special Forces assets in Thailand.10 (See Figure 26).

(U) The Central Identification Laboratory, Thailand, (CIL/Thai) located at Samae San between U-Tapao and Sattahip in Southern Thailand, was under the operational control of the JCRC. The CIL/Thai was organized into an Identification Laboratory and eight
five-man recovery teams which would accompany the casualty resolution field teams. The field teams were to be utilized as separate entities in the search operations for selected locations, or deployed in a cluster arrangement. The cluster concept would be used if a number of concurrent and consecutive crash/grave site operations were located in one general area in the vicinity of a forward operating base adjacent to an air strip which could accommodate arrival, resupply, and departure aircraft. The cluster concept provided a single area of concentration, allowed for maximum advantage to be taken of predicted climatic and weather cycles, maximized the use of helicopters by short but frequent missions to support several teams in one area, enhanced the command, control, and communications support of a number of field teams from the central operating base, facilitated logistics and reduced the insertion problem of the augmentation specialists (Ordnance Demolition Teams, Crash Investigators, Documentary Photographers, and CIL/Thai Recovery Teams).

(U) A review of the steps that would be involved in the recovery process follows: First, the casualty resolution staff would develop selected areas for search and investigation based on known crash and grave sites. The detailed planning and coordination effort using all available information would culminate in an aerial search of the area, if authorized. This combined research would be followed by insertion of the forward operating base and later the field teams and augmentation. The detailed search and inspection would follow. The results of each of these
missions would be carefully documented. Upon completion of the search and investigation process, the teams and forward operating base would be extracted. Remains that have been located would be flown to the CIL/Thai for identification and transfer to the appropriate service in the U.S. After analysis and recording, a detailed report would be forwarded to the services, to assist in final determination on status of the personnel.

(U) There were to be five key principles of operation that pertained to the JCRC's operation. First, the JCRC would be strictly a humanitarian organization. The unit would be totally open in its missions. Second, the JCRC casualty resolution teams would not operate in a hostile environment. Third, international assistance and indigenous assistance would be vital to the mission, but on-site investigation and inspection would be accomplished by U.S. specialists. Fourth, the JCRC would be manned by the most motivated, dedicated, and professional personnel available in the Armed Forces. Lastly, the JCRC would be flexible in its planning and field operations to allow for adaptations based on changing parameters and unexpected situations.

CINCPAC Briefed

(U) Shortly after JCRC's arrival at NKP, General Kingston departed for Hawaii, where he briefed the Commander in Chief, Pacific Command on the progress in establishing the command and to discuss his conception of the tasks ahead in casualty resolution. He also briefed the CINCPAC staff and the component commanders.
<table>
<thead>
<tr>
<th>Rank</th>
<th>ID</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-3</td>
<td>31542</td>
<td>TEAM LEADER</td>
</tr>
<tr>
<td>E-5/7</td>
<td>05B4S</td>
<td>RADIO MAN</td>
</tr>
<tr>
<td>E-6</td>
<td>91B4S</td>
<td>MEDIC</td>
</tr>
<tr>
<td>E-5/7</td>
<td>96C20</td>
<td>INTERROGATOR</td>
</tr>
<tr>
<td>E-6</td>
<td>11B4S</td>
<td>TEAM MEMBER</td>
</tr>
</tbody>
</table>

Possibly augmented by:

- O-3: CRASH INVESTIGATOR
- OFF/NCO/GIV: AREA SPECIALIST
- E-6: EOD/DEMOLITIONS SPECIALIST

(5) O-3+4 E-5s: GRO TEAM
CINCUSARPAC, CINCPACAF, and CINCPACFLT. On his return trip, General Kingston visited in Okinawa with the 1st Special Forces Group and 7th Psychological Operations Group, both charged with tasks in support of casualty resolution. Upon his return, the General personally carried out the liaison requirements with the Embassies in Thailand, Republic of South Vietnam, and Laos, and with the senior military commanders in SEA.12

(U) After the JCRC was established at NKP the JCRC staff spent the remainder of the reporting period updating data on personnel MIA and BNR and developing plans and operations using a series of letters which provided written command guidance on casualty data, staff operations, and field operations.13, 14, 15

Administrative Division.

(U) Major Thomas F. Ryan, U.S. Army, was the Division Chief for the entire period covered by this report. The primary activities of the division during this period were to procure highly qualified, motivated, and professional personnel and to carefully analyze personnel authorization requirements during this formative period of the unit. The initial intent on personnel procurement was to fill the organization from Service assets of MACV. Approximately 70 percent of the unit's manning was realized from MACV resources. The remaining requirements were forwarded to the appropriate Service for action. By 28 February, 76 percent were present for duty out of the 139 personnel spaces authorized. By 31 March, 117 personnel were present for duty out of the 154 authorized, or 76 percent of the authorized positions were filled.

(This page is unclassified)
The Services had identified an additional 23 individuals for assignment. The remaining 15 positions which were not projected included interrogators authorized in the field teams. Major Ryan maintained direct liaison with Service Personnel Offices to expedite manning.\(^16\)

(U) The initial personnel authorization for the JCRC, was 45 officers, 63 enlisted and two civilians for a total of 110 spaces.\(^17\) (See Figure 27). On 29 January, JCS approved the Joint Manpower Program and several additional requests, increasing the unit to 49 officers, 88 enlisted and two civilians, for a total of 139.\(^18\) On 15 February, General Kingston completed a review of existing authorizations and requested an increase of 12 positions.\(^19\) Requests for two additional spaces followed on 16 February.\(^20, 21\) On 1 March, an increase was authorized by JCS to a total of 154, consisting of 56 officers, 96 enlisted, and two civilians.\(^22\) On 2 March, General Kingston requested authorization for 25 local national civilian spaces. Approval of this request was received from JCS on 31 March.\(^23\) This increased the total personnel authorizations to 179 spaces.

(U) During the reporting period, there was a continuous in-depth review of the mission, organization and function of the JCRC. This review took into account changes in operational concepts and new requirements as the unit evolved from a conceptual unit into a fully functioning organization. (See Figures 28 & 29). The manpower requirement study was continuous to meet actual requirements and to eliminate previously authorized positions which

\(^{(This\ page\ is\ unclassified)}\)
<table>
<thead>
<tr>
<th>Year</th>
<th>Army</th>
<th>Navy</th>
<th>AF</th>
<th>MC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>06</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>05</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>04</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>03</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>8</td>
<td>5</td>
<td>45</td>
</tr>
</tbody>
</table>

**Total Officer**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Army</th>
<th>Navy</th>
<th>AF</th>
<th>MC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>E9</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>E8</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>E7</td>
<td>10</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>E6</td>
<td>28</td>
<td>3</td>
<td>2</td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>E5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>63</td>
</tr>
</tbody>
</table>

**Total MIL**

|      | 68   | 13   | 19  | 8   | 108   |

**U.S. CIV**

|      | 2    |

**Total CIV**

|      | 2    |

**Grand Total**

|      | 68   | 15   | 19  | 8   | 110   |

Extract from Joint Manpower Program approved by JCS 131746Z NOV 72
were found not to be mission essential. This study was being concluded at the end of the quarter for further recommended amendments to the JCRC personnel authorization.24

Casualty Data Division

(U) Major Fredwin M. Odom, U.S. Army, was Division Chief until 29 March 1973, when he was replaced by Lt. Col. Thomas E. Stout, U.S. Army. The Casualty Data Division (named Intelligence Division until 5 March) was formed concurrently with the activation of the JCRC on 23 January. Eight of the 15 personnel formerly assigned to the Joint Personnel Recovery Center formed the nucleus of the Division.25

Operation Homecoming

(U) The major project during the period of this report was the role as a major participant in Operation Homecoming, the repatriation of U.S. POWs from Viet Cong and NVN captivity. A two-man team was detached to the Joint Homecoming Command Post, Clark AB, Philippines, for direct participation in the operation. The remaining portion of the Casualty Data Division provided continual support from the JCRC Headquarters.

The primary function of the JCRC representatives was to assist all military Services and State Department debriefers in preparing themselves to debrief U.S. military/civilian and third country national returnees during Phase II of Operation Homecoming. The prime objective in mind was casualty resolution. JCRC support took on varied forms. The initially envisioned task of
furnishing Essential Elements of Information (EEI) to debriefers was far exceeded. The effort saw participation by three JCRC elements or teams. Each team was kept informed of special EEI and furnished with various special listings and information concerning casualty-related data. One area undertaken by the JCRC teams was the promotion of the commonality of purpose of this joint effort. In this regard, JCRC furnished each debriefing team with full POW/MIA data on members of the other Services. The tools which were used were Special Collection Program Print-outs, Defense Intelligence Agency Photo Identification Books, and Special Print-outs and information from the individual JCRC teams at NKP and Saigon. SP6 Juergen K. Buehring provided some special assistance to the State Department in that he personally conducted the debriefings of two German Nationals and two Thai Nationals. The NKP teams provided invaluable services to the effort by providing key questions for each returnee. Since the impracticality of transporting all of the dossiers to Clark AB was long since decided against, the Clark AB team relied heavily upon the NKP team for special requests for information and remained in constant contact with them. The NKP team's swift response to special requests was most timely and effective.26

The Saigon team effort was centered around providing the POW release date information to the Operation Homecoming Command Post through the Clark AB team. As a result of their effort, JCRC "scooped" all other agencies by providing the first release list. Subsequent releases were also sent in the same fashion to
verify the accuracy of hard copy telegraphic messages used in deference to telephone conversations. Further, Lt. Cmdr. Michael T. Drew assisted in the debriefing at the American Embassy/ Saigon of Canadian National, Marc O. Cayer.27

Organizational Change

(U) An organizational change occurred on 5 March 1973. The Casualty Records Division was redesignated the Casualty Records Branch, a sub-element of the Casualty Data Division. No change in manning was involved. The purpose of this reorganization was to bring all data on MIA/BNR under one staff element, which consisted of four branches: Casualty Records, Photo Interpretation/Maps, Site Development, and Data Analysis.

(U) In March, the Commander, JCRC, authorized direct contact between casualty resolution records offices and the Service casualty offices at Departmental level. Direct telephone contact provided rapid and responsive exchange of information concerning individual MIA/Killed In Action (KIA) cases. This channel was used for reconciliation and purification of records and did not replace normal channels concerning matters of policy or status resolution.

(U) The casualty resolution records, inherited from the JPRC, were designed to support the combat zone mission of recovery; i.e., to identify and locate living U.S. POW/MIA. Conversion and re-orientation of these records to the Joint Casualty Resolution mission began on 5 March with the reorganization of the Casualty Records Branch. The purpose of this review was to determine what additional information was required from the appropriate agencies.
Review of Navy and U.S. Marine Corps records was largely complete by the end of the reporting period. Air Force and Army records continued to be reviewed. 28

Operations

(U) Lt. Col. Robert E. Cleveland, U.S. Marine Corps, was the Operations Division Chief during this reporting period. The primary activity of the Division during the period was to develop plans and coordinate related actions implementing the Commander's Guidance on Casualty Data and the Commander's Guidance for Field Operations. The Division assisted in field team training and coordinated casualty resolution matters with the Deputy for Field Operations. (U) The Communications Branch worked closely with the supply officer to establish communications requirements for field teams and to obtain the required equipment. Planning actions for the JCRC Operations Center at 7th AF TACC (Blue Chip) was completed. The Public Communications Branch became operational with the arrival of the Branch Chief on 27 February, followed by his assistant a week later. The following coordination trips were completed to establish points of contact and to discuss concepts for public communications plans:

--Okinawa (7th PSYOPS) 28 Feb - 5 Mar
--Bangkok, Thailand 12-14 Mar
--Vientiane, Laos 25-26 Mar
--Saigon, RVN 25-28 Mar

By 31 March 1975, public communications plans for Laos and RVN had (This page is unclassified)
been completed and were prepared for final submission for approval.

(U) The Graves Registration Officer (GRO) directed his initial efforts to training field team personnel on the techniques of remains identification and the importance of thorough documentation as to the location, handling, identification and preservation of remains sighted at crash/grave sites. Additionally, the GRO prepared equipment lists and documentation requirements for Grave Registration Field Team personnel. In March, JCRC asked MACTHAI to query the Royal Thai Government (RTG) for training areas to exercise the field teams and their equipment.\(^{29}\) The RTG approved the request and named Nong Takoo, Phu Wiang, Phu Kradung, Lang Kao, Nam Phung Dam, and Loeng Nok Tha as the training sites. However, the RTG approval was contingent upon the fact that no live firing of weapons or demolitions would be conducted.\(^{30}\)

(U) On 24 March, in response to a USSAG request, CINCPAC attached three U-21 aircraft for dedicated air support (administrative, liaison, and operational) to the JCRC.\(^{31}\) These assets, expected in late April, were to be assigned to the 70th Aviation Detachment in Bangkok and under the operational control of and collocated with the JCRC Headquarters at NKP.

**Automatic Data Processing**

(U) Lt. Cdr. Henry W. Schmauss, Jr., U.S. Navy, was the Division Chief during this reporting period. As the JCRC was being established, a team from CINCPAC was in the process of converting a data base known as Bright Light from Modular Data
Handling System (MODS) language programs to Common Business Oriented Language (COBOL) programs. The conversion was necessary because NKP did not have the MODS capability. The Bright Light System contained a variety of information on POW biographies, crash sites, and POW camps. Prior to the release of the POWs, the particular interest was biographic information. Since the release, the main interest switched to crash site information.

On 28 February, the COMUSSAG asked CINCPACAF to provide assistance in obtaining adequate documentation for systems maintenance, thereby allowing USSAG to accept program maintenance responsibility for the Bright Light System. Through a telephone conversation, an agreement was reached whereby CINCPAC and USSAG would share the documentation and each would document portions of the program. This was of particular importance to JCRC because of its use of the system.

(U) Early in March, the desirability to use the computer to plot crash sites was discussed. After analyzing the requirements, external expertise was sought in by-name requests for Capt. Howard L. Parris, U.S. Air Force, and Mr. Paul Haydostian, to be placed on temporary duty to the JCRC for a period of 90 and 30 days, respectively. Captain Parris was educated and experienced in operations research/systems analysis techniques, especially related to computer applications. Mr. Haydostian, a civilian employee of Computer Services Corporation under United States Agency for International Development (USAID) contract, was specifically requested to assist in printer plotting capability for its crash
site files. CINCPAC approved both requests.

(U) Late in February, it became apparent that the JCRC needed an organic key punch capability. A request was made to CINCPAC for authority to lease an International Business Machines (IBM) 029 key punch machine. This request was also approved.

(U) On 7 March, the first COBOL update was attempted and revealed major problems with some printouts. JCRC requested that PACOM ELINT CENTER, Hickam AFB, Hawaii, which was running parallel in "MODS", continue processing until such time as JCRC printouts were corrected. On 20 March, a set of tapes arrived from CINCPAC which were used to clear up the JCRC printouts. On 31 March, the second attempt to update was accomplished and the printout problems were corrected. As an on-going project through March, minor errors in information were being noted and corrected. By 31 March, the minor errors had been rectified and all changes in status due to the release of POWs was entered. During the period of this report, 150 computer runs were used to provide 835 printouts (in excess of 30,000 pages).

Public Affairs

(U) The Public Affairs Officer, Lt. Col. Llyle Barker, U.S. Army, arrived at the JCRC on 27 February after briefings at the Office of the Assistant Secretary of Defense, Public Affairs (ASD/PA), and the CINCPAC Public Affairs Office in Honolulu. An additional office space was requested on 16 March to operate from the office of the CINCPAC Public Affairs representative. The
purpose of this position was to provide a casualty resolution desk in Bangkok to respond to media and public requests, and to provide a point of contact between the Embassy Public Affairs staff and JCRC. This position was approved by the JCS. Several proposed releases on JCRC were forwarded to ASD/PA, through channels, for clearance. Releases were made from Bangkok when clearance was received. Initial coordination for documentary support was accomplished in meetings with the Commander, 601st Photo Squadron.

Staff Judge Advocate

(U) The Staff Judge Advocate, Maj. Charles Murray, U.S. Army, arrived at JCRC on 31 March. While en route he spent two days at the Judge Advocate Office, USMACTHAI/JUSMAGTHAI at which time he was briefed on matters pertaining to Judge Advocate operations in Thailand.

Comptroller

(U) Maj. Donald Haacox, U.S. Air Force, was Acting Budget Officer from 15 February to 28 March. Lt. Cdr. C. L. Humphrey, U.S. Navy, arrived as Comptroller on 29 March. JCRC was established as a separately funded organization with the establishment of a Unit Identification Code (UIC) of 33011. Initial funding was $250,000 for the 3rd Quarter, Fiscal Year 73. The resource was Operations and Maintenance (O&M), Navy funds and was provided by CINCPOAC.

Field Elements

(U) One of the initial actions of the field teams was to
establish a JCRC Field Team Standard Operating Procedure (SOP). As teams received personnel, the training program progressed through five weeks. The entire training cycle would be repeated as new personnel arrived. Lt. Col. Frank Collins, U.S. Army, Vietnam Control Team Chief, and Lt. Col. Jesse Yaden, U.S. Army, Laos/Cambodia Control Team Chief, occupied these positions throughout the period of the report.

CIL/THAI

(U) The Central Identification Laboratory, Thailand, became operational on 23 March, under command of Lt. Col. Harold Tucker, U.S. Army. Located at Samae San, Thailand, the CIL/THAI was assigned to USARSUPTHAI and under operational command of the JCRC. The cadre of the CIL/THAI were from the former Saigon Mortuary Unit.

Distinguished Visitors and Briefings

(U) Among the individuals briefed at NKP on the JCRC were Dr. Rechtin, ASD/Tele-Communications; General Horace Wade, Vice Chief of Staff, U.S. Air Force; Lt. Gen. Corcoran, Deputy CJNCPAC; Governor Sunan, Thai Governor of NKP Province; Mr. Seub, Deputy Governor, NKP; Col. Amporn, NKP Provincial Police Chief; Mr. Lowenstein and Mr. Moose, staff representatives for the Senate Foreign Relations Committee; Brig. Gen. Russell Ogan, POW/MIA Committee, Office of the Secretary of Defense; Colonel Albright, representative of League of Families; as well as General Vogt, Commander, USSAG and key members of the USSAG staff. In addition,
General Kingston briefed CINCPAC and his component commanders in Hawaii; Ambassadors Bunker, Godley, Unger and Whitehouse and their staffs; and the Embassy DAO's of Vietnam, Laos, and Thailand and their staffs.43

(This is unstated)
FOOTNOTES

CHAPTER VI

1. Hq USMACV G.O. 177, 23 Jan 73.

2. Hq USMACV G.O. 543, 6 Feb 73.

3. Hq USMACV G.O. 671, 15 Feb 73.

4. Hq JCRC Fact Sheet (U), undated.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.


13. Ltr (U), Hq JCRC, 13 Mar 73, Subj: Command Guidance on Casualty Data (U).

14. Ltr (U), Hq JCRC, 26 Mar 73, Subj: Command Guidance for JCRC Staff (U).

15. Ltr (U), Hq JCRC, 31 Mar 73, Subj: Command Guidance on Field Operations (U).


17. Ibid.

18. Msg (U), JCS to CINCPAC, 29221Z Jan 73, Subj: Joint Casualty Resolution Center, Pacific Joint Manpower Program 31 December 1972 (U).

(This page is unclassified)
19. Msg (C), JCRC to CINCPAC, 150745Z Feb 73, Subj: Review of Joint Casualty Resolution Center Joint Manpower Program (U), GDS-1979.

20. Msg (C), JCRC to CINCPAC, 160352Z Feb 73, Subj: Joint Casualty Resolution Center Joint Manpower Program (U), GDS-1979.

21. Msg (U), JCRC to CINCPAC, 160557Z Feb 73, Subj: Joint Casualty Resolution Center (U).

22. Msg (C), JCS to CINCPAC, Info JCRC, 012120Z Mar 73, Subj: Changes to Joint Casualty Resolution Center Joint Manpower Program (U), GDS-1979.

23. Msg (U), JCS to CINCPAC, Info JCRC, 021559Z Apr 73, Subj: Hire of Local Nationals for Joint Casualty Resolution Center (U).


25. Ibid.


27. Ibid.


29. Msg (U), USSAG/7AF to MACTHAI, 200840Z Mar 73, Subj: Request for Casualty Resolution Sites (U).

30. Msg (U), MACTHAI to USSAG/7AF, 020219Z Apr 73, Subj: Request for Casualty Resolution Training Sites (U).

31. Msg (U), CINCPAC to USSAG, 242243Z Mar 73, Subj: Airborne Radio Relay Requirements for JCRC (U).

32. Msg (C), USSAG to CINCPAC, 281901Z Feb 73, Subj: System Documentation for Bright Lights Capability (U), GDS-1979.


34. Msg (U), JCRC to USAID/Saigon, 231001Z Mar 73, Subj: Request for Computer Assistance (U).
35. Msg (U), JCRC to CINCPAC, 280030Z Feb 73, Subj: Request for Authority to Lease Computer Equipment (U).


37. Ibid.

38. Ibid.

39. Ibid.

40. Ibid.

41. Hq USARPAC G.O. 119, 23 Mar 73.

42. Rpt (C), Hq JCRC, 15 Feb - 31 Mar 73, Subj: Historical Report (U), GDS-1979.

43. Ibid.

(Continued ... classified)
CHAPTER VII
HEADQUARTERS COMMANDANT

Organization

(U) In November 1972, Col. I. D. Rothwell, then Deputy Commander/Operations, 377th Air Base Wing, Tan Son Nhut AB, RVN, was designated to become the Commandant for Headquarters USSAG/7AF. On 6 December 1972, Colonel Rothwell was a member of the informal advance echelon at NKP which provided a central point of interface between the new headquarters staff and the host base. This role, although considerably expanded, remained virtually unchanged throughout this reporting period.

(U) A specific function served by Colonel Rothwell was his role as representative for the COMUSSAG at briefings conducted by COMUSMACTHAI and the U.S. Ambassador to Thailand. These briefings were required prior to receiving country clearance for the USSAG move to NKP.

(U) The project to design, construct, and modify the facilities at NKP for USSAG and its supporting units was designated "NKP Facilities Upgrade." The Vice Commander, 56th Special Operations Wing, was designated as Base Project Director to head a team of personnel from all sections required to accomplish this task. The Director of Civil Engineering, 7AF, was assigned on TDY status as the overall Civil Engineering Project Officer who had the authority to act for both the 7th and 13th AF. This group of people managed the construction/modification programs. Additional

(This page is unclassified)
personnel from 7AF, MACV, and other interested agencies were placed on TDY at NKP to supervise and/or assist in specialized areas such as supply, command/control facility, and the required communications schemes.

(U) Among the personnel in the informal advance party at NKP were persons destined to become members of the Commandant function—a function that was essentially the point of interface between USSAG and the host base unit, the 56th Combat Support Group. The initial JTD for the Commandant function provided for budget, transportation, supply, and clerical personnel; however, it rapidly become apparent that the structure did not parallel the assumed mission. Therefore, a change was requested.

(U) The redefined structure deleted the transportation function, reduced the supply section manning, and established a Headquarters Squadron Section. The re-structure was made possible as a result of the Host Base Support Agreement. The Headquarters Squadron Commander, First Sergeant, and Supply NCO functions were aligned to handle enlisted personnel housing and administrative requirements that were not provided by the host base. These services were extended to all USSAG and support units regardless of service; thus, Air Force, Army, Navy, and Marine Corps personnel were all accommodated within the USSAG Headquarters Squadron Section area of responsibility. The Headquarters Squadron Section was Commanded by Maj. James E. Speight, with CMSgt. Robert R. Veselka as First Sergeant and MSgt. Jack R. Newmen as Supply NCO. Sergeants Veselka and Newmen were among the informal advance group at NKP and
were responsible for the establishment of the Squadron Orderly Room functions of billeting, administration, and supply for all enlisted personnel assigned to USSAG and its supporting units. A group of 15 barracks were under the management of the Squadron. Allocation of the barracks to sub-elements such as Navy and JCRC personnel was also achieved. Of constant concern was the continuous program to improve barracks living conditions, particularly in the area of air conditioning. However, base power limitations prohibit installation at this time. The host base requested command guidance on this matter from 13AF.5

(U) Immediately prior to movement from Saigon, large quantities of supplies and equipment were retro-graded to NKP and placed in a holding account for distribution to the staff agencies and support units of the new headquarters. The Supply NCO, assisted by Base Supply personnel, managed the large quantity of materiel, and established the basic supply accounting system for the entire headquarters.6

Funding

(U) The USSAG was funded through the Pacific Command by Operations and Maintenance, Navy (O&M, N) funds. Since it was considered prudent that the Budget Officer be conversant with Navy financial management policies and procedures, Lt. Charles J. Kice, U.S. Navy, was assigned the position. He reported to NKP as a member of the informal advance group and accomplished the necessary preliminary tasks prior to the move of the
headquarters.

(U) The initial amount of funds provided for the third quarter of Fiscal Year 73 was $500,000. MACTHAI was designated as the authorized accounting activity for USSAG O&M, N funds. As of 31 March 1973, $156,604.23 of the O&M, N funds had been obligated.

(U) During January and February 1973, action was taken to establish channels of support with the 56th Combat Support Group. Inter Service Support Agreement 50-FB5228-0009-3 was negotiated between USSAG and the host base, and provided for reimbursable support in the area of supplies, equipment, utilities, contractual services, facilities engineering, and vehicle maintenance. It was estimated that the annual amount of reimbursable support would amount to 1.034 million dollars.

(U) The major funding problem encountered in establishing USSAG's operation was in the area of civilian pay. Since all USSAG civilians were paid through a Navy appropriation, they were designated as Navy employees and could not be administered by the local Air Force Civilian Personnel Office. As a result, the Civilian Personnel Office, MACTHAI, agreed to service the USSAG civilians, and the Accounting and Finance Office at U-Tapao agreed to act as the paying activity.
FOOTNOTES

CHAPTER VII

1. Rpt (U), Hq USSAG/7AF (DT), 15 Feb - 31 Mar 73, Subj: Historical Report (U).

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Msg (U), CINCPAC to USSAG, 270030Z Jan 73, Subj: O&M, N Funds (U).

8. Rpt (U), Hq USSAG/7AF (DT), 15 Feb - 31 Mar 73, Subj: Historical Report (U).

9. Ibid.

(This page is unclassified)
### Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Anti-Aircraft Artillery</td>
</tr>
<tr>
<td>ABCCC</td>
<td>Airborne Command and Control Center</td>
</tr>
<tr>
<td>ACCS</td>
<td>Airborne Command Control Squadron</td>
</tr>
<tr>
<td>ACS</td>
<td>Assistant Chief of Staff</td>
</tr>
<tr>
<td>AFSC</td>
<td>Air Force Communications Service</td>
</tr>
<tr>
<td>AFSSO</td>
<td>Air Force Special Security Office</td>
</tr>
<tr>
<td>ALC</td>
<td>Air Logistics Command</td>
</tr>
<tr>
<td>APR</td>
<td>Airman Performance Report</td>
</tr>
<tr>
<td>ARVN</td>
<td>Army of the Republic of Vietnam</td>
</tr>
<tr>
<td>ASD/PA</td>
<td>Assistant Secretary of Defense, Public Affairs</td>
</tr>
<tr>
<td>BDA</td>
<td>Bomb Damage Assessment</td>
</tr>
<tr>
<td>BNR</td>
<td>Bodies Not Recovered</td>
</tr>
<tr>
<td>BSD</td>
<td>Battle Staff Director</td>
</tr>
<tr>
<td>CAS</td>
<td>Close Air Support</td>
</tr>
<tr>
<td>CBPO</td>
<td>Consolidated Base Personnel Office</td>
</tr>
<tr>
<td>C-E</td>
<td>Communications-Electronics</td>
</tr>
<tr>
<td>CEMB</td>
<td>Communications Electronics Meteorological Board</td>
</tr>
<tr>
<td>CHJUSMAGTHAI</td>
<td>Chief, Joint United States Military Advisory Group, Thailand</td>
</tr>
</tbody>
</table>

(This page is unclassified)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIL/THAI</td>
<td>Central Identification Laboratory, Thailand</td>
</tr>
<tr>
<td>CINCPAC</td>
<td>Commander In Chief, Pacific</td>
</tr>
<tr>
<td>COBOL</td>
<td>Common Business Oriented Language</td>
</tr>
<tr>
<td>COMINT</td>
<td>Communications Intelligence</td>
</tr>
<tr>
<td>COMUSMACTHAI</td>
<td>Commander, United States Military Assistance Command, Thailand</td>
</tr>
<tr>
<td>COMUSMACV</td>
<td>Commander, United States Military Assistance Command, Vietnam</td>
</tr>
<tr>
<td>COMUSSAG</td>
<td>Commander, United States Support Activities Group</td>
</tr>
<tr>
<td>CONUS</td>
<td>Continental United States</td>
</tr>
<tr>
<td>CROC</td>
<td>Combat Required Operational Capabilities</td>
</tr>
<tr>
<td>CSGp</td>
<td>Combat Support Group</td>
</tr>
<tr>
<td>CTF</td>
<td>Carrier Task Force</td>
</tr>
</tbody>
</table>

**D**

- Department of the Army
- Defense Attache Office
- Direct Air Support Center
- Defense Communications Agency
- Deputy Chief of Staff, Logistics
- Director of Logistics
- Director of Operations
- B-52 Operations Division
- Command and Control Division
- Air Defense Branch
- Tactical Air Control Center
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCM</td>
<td>Target Management Branch</td>
</tr>
<tr>
<td>DOCS</td>
<td>Standardization Evaluation Section</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DOO</td>
<td>Current Operations Division</td>
</tr>
<tr>
<td>DOO0</td>
<td>Frag Order Branch</td>
</tr>
<tr>
<td>DOOR</td>
<td>Reconnaissance Branch</td>
</tr>
<tr>
<td>DOS</td>
<td>Surface Operations and Plans Division</td>
</tr>
<tr>
<td>DOX</td>
<td>Operation Plans Division</td>
</tr>
<tr>
<td>DOXC</td>
<td>Contingency Plans Branch</td>
</tr>
<tr>
<td>DOXW</td>
<td>Weapons and Tactical Branch</td>
</tr>
<tr>
<td>DPA</td>
<td>Administration Services Division</td>
</tr>
<tr>
<td>DPM</td>
<td>Military Personnel Division</td>
</tr>
<tr>
<td>DRSTO</td>
<td>Defense Resources Surveillance and Termination Office</td>
</tr>
<tr>
<td>DSA</td>
<td>District Senior Advisor</td>
</tr>
<tr>
<td>EAC</td>
<td>Emergency Action Console</td>
</tr>
<tr>
<td>ECM</td>
<td>Electronic Countermeasures</td>
</tr>
<tr>
<td>EEI</td>
<td>Essential Elements of Information</td>
</tr>
<tr>
<td>ELINT</td>
<td>Electronics Intelligence</td>
</tr>
<tr>
<td>EO5</td>
<td>Electronics Order of Battle</td>
</tr>
<tr>
<td>EWO</td>
<td>Electronics Warfare Officer</td>
</tr>
<tr>
<td>FAC</td>
<td>Forward Air Controller</td>
</tr>
<tr>
<td>FANK</td>
<td>Forces Armees Nationales Khmer</td>
</tr>
<tr>
<td>FWMAF</td>
<td>Free World Military Assistance Forces</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>GCI</td>
<td>Ground Controlled Intercept</td>
</tr>
<tr>
<td>GRO</td>
<td>Graves Registration Officer</td>
</tr>
<tr>
<td>GVN</td>
<td>Government of Vietnam</td>
</tr>
<tr>
<td>HF</td>
<td>High Frequency</td>
</tr>
<tr>
<td>HOI</td>
<td>Headquarters Operating Instruction</td>
</tr>
<tr>
<td>IBM</td>
<td>International Business Machines</td>
</tr>
<tr>
<td>ICR</td>
<td>Collection Requirements</td>
</tr>
<tr>
<td>IFR</td>
<td>Instrument Flight Rules</td>
</tr>
<tr>
<td>INC</td>
<td>Intelligence Collection Division</td>
</tr>
<tr>
<td>INCO</td>
<td>Intelligence Capabilities Branch</td>
</tr>
<tr>
<td>INCR</td>
<td>Intelligence Reconnaissance Branch</td>
</tr>
<tr>
<td>INI</td>
<td>Intelligence Indication Division</td>
</tr>
<tr>
<td>INO</td>
<td>Operational Intelligence Division</td>
</tr>
<tr>
<td>INOC</td>
<td>Intelligence Capabilities Branch</td>
</tr>
<tr>
<td>INOE</td>
<td>Intelligence Estimates Branch</td>
</tr>
<tr>
<td>INOS</td>
<td>Intelligence Situation Branch</td>
</tr>
<tr>
<td>INT</td>
<td>Intelligence Targets Division</td>
</tr>
<tr>
<td>INTD</td>
<td>Intelligence Target Development Branch</td>
</tr>
<tr>
<td>INTT</td>
<td>Intelligence Tactical Targets Branch</td>
</tr>
<tr>
<td>ISSA</td>
<td>Inter Service Support Agreement</td>
</tr>
</tbody>
</table>

(This page is unclassified)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCRC</td>
<td>Joint Casualty Resolution Center</td>
</tr>
<tr>
<td>JCS</td>
<td>Joint Chiefs of Staff</td>
</tr>
<tr>
<td>JGS</td>
<td>Joint General Staff</td>
</tr>
<tr>
<td>JPRC</td>
<td>Joint Personnel Recovery Center</td>
</tr>
<tr>
<td>JTD</td>
<td>Joint Tables of Distribution</td>
</tr>
<tr>
<td>KIA</td>
<td>Killed In Action</td>
</tr>
<tr>
<td>LCO</td>
<td>Launch Control Officer</td>
</tr>
<tr>
<td>LOC</td>
<td>Launch Operation Center</td>
</tr>
<tr>
<td>LORAN</td>
<td>Long Range Airborne Navigation</td>
</tr>
<tr>
<td>LST</td>
<td>Landing Ship, Tank</td>
</tr>
<tr>
<td>MACTHAI</td>
<td>Military Assistance Command, Thailand</td>
</tr>
<tr>
<td>MACV</td>
<td>Military Assistance Command, Vietnam</td>
</tr>
<tr>
<td>MAP</td>
<td>Military Assistance Programs</td>
</tr>
<tr>
<td>MASF</td>
<td>Military Assistance Service Funding</td>
</tr>
<tr>
<td>MATT</td>
<td>Military Air Transportation Terminal</td>
</tr>
<tr>
<td>MEDTC</td>
<td>Military Equipment Delivery Team, Cambodia</td>
</tr>
<tr>
<td>MIA</td>
<td>Missing In Action</td>
</tr>
<tr>
<td>MODS</td>
<td>Modular Data Handling System</td>
</tr>
<tr>
<td>MR</td>
<td>Military Region</td>
</tr>
<tr>
<td>MSQ</td>
<td>Mobile Search Special</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>NCO</td>
<td>Noncommissioned Officer</td>
</tr>
<tr>
<td>NKPh</td>
<td>Nakhon Phanom</td>
</tr>
<tr>
<td>NM</td>
<td>Nautical Mile</td>
</tr>
<tr>
<td>NVN</td>
<td>North Vietnam</td>
</tr>
<tr>
<td>OER</td>
<td>Officer Effectiveness Report</td>
</tr>
<tr>
<td>OI</td>
<td>Office of Information</td>
</tr>
<tr>
<td>OJT</td>
<td>On-The-Job-Training</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operations and Maintenance</td>
</tr>
<tr>
<td>O&amp;M, N</td>
<td>Operations and Maintenance, Navy Funds</td>
</tr>
<tr>
<td>OPORD</td>
<td>Operations Order</td>
</tr>
<tr>
<td>OPR</td>
<td>Office of Primary Responsibility</td>
</tr>
<tr>
<td>OPREP</td>
<td>Operations Report</td>
</tr>
<tr>
<td>OPSEC</td>
<td>Operations Security</td>
</tr>
<tr>
<td>PACOM</td>
<td>Pacific Command</td>
</tr>
<tr>
<td>PAO</td>
<td>Public Affairs Office</td>
</tr>
<tr>
<td>PATMA</td>
<td>Pacific Transportation Management Agency</td>
</tr>
<tr>
<td>PDO</td>
<td>Publications Distribution Office</td>
</tr>
<tr>
<td>PEC</td>
<td>Pacific Electronics-Intelligence Center</td>
</tr>
<tr>
<td>POW</td>
<td>Prisoner of War</td>
</tr>
<tr>
<td>PSA</td>
<td>Province Senior Advisors</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>RLG</td>
<td>Royal Laoction Government</td>
</tr>
<tr>
<td>RMS</td>
<td>Ramasun</td>
</tr>
<tr>
<td>ROE</td>
<td>Rules of Engagement</td>
</tr>
<tr>
<td>R&amp;R</td>
<td>Rest and Recuperation</td>
</tr>
<tr>
<td>RRA</td>
<td>Radio Relay Aircraft</td>
</tr>
<tr>
<td>RTG</td>
<td>Royal Thai Government</td>
</tr>
<tr>
<td>RTS</td>
<td>Reconnaissance Tactical Squadron</td>
</tr>
<tr>
<td>RVN</td>
<td>Republic of Vietnam</td>
</tr>
<tr>
<td>RVNAF</td>
<td>Republic of Vietnam Armed Forces</td>
</tr>
<tr>
<td>SAC</td>
<td>Strategic Air Command</td>
</tr>
<tr>
<td>SEA</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>SAM</td>
<td>Surface-to-Air Missile</td>
</tr>
<tr>
<td>SAR</td>
<td>Search and Rescue</td>
</tr>
<tr>
<td>SAO</td>
<td>Special Activities Office</td>
</tr>
<tr>
<td>SDO</td>
<td>Senior Duty Officer</td>
</tr>
<tr>
<td>SEA</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>SEAC</td>
<td>Southeast Asia Command</td>
</tr>
<tr>
<td>SEADAB</td>
<td>Southeast Asia Data Base</td>
</tr>
<tr>
<td>SEASO</td>
<td>Southeast Asia Support Command</td>
</tr>
<tr>
<td>SECDEF</td>
<td>Secretary of Defense</td>
</tr>
<tr>
<td>SI</td>
<td>Special Intelligence</td>
</tr>
<tr>
<td>SIGINT</td>
<td>Signal Intelligence</td>
</tr>
<tr>
<td>SMAS</td>
<td>Special Mekong Air Sector</td>
</tr>
</tbody>
</table>

(This page is unclassified)
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECOL</td>
<td>Special Customer Oriented Language</td>
</tr>
<tr>
<td>SUPCOM</td>
<td>Support Command</td>
</tr>
<tr>
<td>TACAIR</td>
<td>Tactical Air</td>
</tr>
<tr>
<td>TACAN</td>
<td>Tactical Air Navigation</td>
</tr>
<tr>
<td>TACC</td>
<td>Tactical Air Control Center</td>
</tr>
<tr>
<td>TAW</td>
<td>Tactical Airlift Wing</td>
</tr>
<tr>
<td>TDY</td>
<td>Temporary Duty</td>
</tr>
<tr>
<td>TFA</td>
<td>Task Force Alpha</td>
</tr>
<tr>
<td>TMO</td>
<td>Target Management Branch</td>
</tr>
<tr>
<td>TRS</td>
<td>Tactical Reconnaissance Squadron</td>
</tr>
<tr>
<td>TRW</td>
<td>Tactical Reconnaissance Wing</td>
</tr>
<tr>
<td>TSN</td>
<td>Tan Son Nhut</td>
</tr>
<tr>
<td>UHF</td>
<td>Ultra High Frequency</td>
</tr>
<tr>
<td>UIC</td>
<td>Unit Identification Code</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>USARPAC</td>
<td>United States Army, Pacific</td>
</tr>
<tr>
<td>USASUPHAI</td>
<td>United States Army Support, Thailand</td>
</tr>
<tr>
<td>USARV</td>
<td>United States Army, Republic of Vietnam</td>
</tr>
<tr>
<td>USSAG/7AF</td>
<td>United States Support Activities Group/Seventh Air Force</td>
</tr>
<tr>
<td>VFR</td>
<td>Visual Flight Rules</td>
</tr>
<tr>
<td>VHF</td>
<td>Very High Frequency</td>
</tr>
</tbody>
</table>
VNAF  Vietnamese Air Force
VNN  Vietnamese Navy
WAPS  Weighted Airman Promotion System
HISTORY OF THE U.S. SUPPORT ACTIVITIES GROUP
HISTORY
OF THE
UNITED STATES SUPPORT ACTIVITIES GROUP
1 APRIL - 30 JUNE 1973

BY
MSgt FRANK M. WHITACRE
HISTORIAN
12 SEP 1973

APPROVED BY:
JOHN W. VOGT, GENERAL, USAF COMMANDER

(This page is Unclassified)
PACIFIC COMMAND, UNITED STATES AIR FORCE
COMMANDER AND STAFF, USSAG/7AF

GENERAL JOHN H. VOGT (seated), COMMANDER, USSAG/7AF

STAFF: (L-R) LT COL DONALD J. PETERSON, PUBLIC AFFAIRS OFFICER; MAJ GEN STAN L. MCCLELLAN, ASST C/S LOGISTICS; COL WALLACE WESSEL, INSPECTOR GENERAL; MAJ GEN HOWARD H. COOKSEY, DEPUTY COMMANDER; COL IAN D. ROTHWELL, HEADQUARTERS COMMANDANT; BRIG GEN HILDING L. JACOBSON, JR., ASST C/S INTELLIGENCE; RADM HENRY P. GLINGEMAN, JR., CHIEF, FLEET COORD GROUP; MAJ GEN JAMES D. HUGHES, CHIEF OF STAFF; COL FRANK A. WALL, ASST C/S COMM-ELECT; BRIG GEN JACK BELLAMY, ASST C/S OPERATIONS; COL COLA R. MORRIS, ASST C/S PERSONNEL AND LT COL B. R. KING, SECRETARY, JOINT STAFF.
This historical report, which covers the period 1 April 1973 through 30 June 1973, is the first full quarter summation of events for the USSAG/7AF headquarters.

Contrary to the previous report, which highlighted the establishment of this organization, this history concentrates primarily on the operational functions.

This being the final report to be authored by this historian, grateful appreciation is conveyed to all the staff agencies for their generous contribution of time and material in the preparation of this history. A note of special appreciation is also extended to Staff Sergeant Douglas D. Kraus and Technical Sergeant Chester J. Resko for their typing of the report, and to Lt. Col. B. R. King, Secretary of the Joint Staff, for his editing assistance.

August 1973

PMW
# CONTENTS

**FOREWORD** .................................................. iii

## I. MISSION AND RESOURCES ........................................ 1

- **Mission** ................................................. 1
  - Functions ........................................... 1
  - USSAG/7AF Status Queried .......................... 2
  - Air Operations in Cambodia ....................... 6
  - Laos Status ........................................... 9
  - Tripartite Deputies Conference .................. 16
  - Organization ......................................... 29

- **Resources** ................................................ 29
  - Changes in Key Personnel .......................... 29
  - Administration of Military Justice ............ 29
  - Administration of US Army Personnel .......... 31
  - Return of Vietnam Absentees and Deserters .... 32
  - Environmental and Morale Leave for Vietnam ... 33
  - Out-of-Country Rest and Recuperation (R&R) for SEA ................................. 33
  - Individual and Dependent Benefits for Civilian Irregular Defense Group (CIDG) ....... 36
  - In-Country Military Strength ..................... 37
  - Awards and Decorations ............................. 37
  - Officer and Airmen Manning Unit ............... 38
  - Officer and Airmen Assignment Unit .......... 39
  - Administrative Branch .............................. 39
  - USSAG/7AF Inspector General ...................... 40

**FOOTNOTES** ............................................... 43

## II. INTELLIGENCE ............................................... 47

- **Mission** ................................................. 47
  - Khmer Analyst Viewpoint of War .................. 48
  - Intelligence Organization and Functions ....... 49
  - Collections Division ................................ 49
  - Plans and Support Division ....................... 59
  - Summary of ARC LIGHT Strikes - May 73 ........ 60
  - Summary of ARC LIGHT Strikes - June 73 ....... 61
  - Operational Intelligence Division ............. 63
  - Targets Division .................................... 65

**FOOTNOTES** ............................................... 69
III. OPERATIONS .......................................................... 70

Command and Control ................................................. 70
Air Defense .................................................................. 82
Contingency Plans ...................................................... 86
Weapons and Tactics .................................................... 87
Electronic Countermeasures (ECM) Training .................... 90
Gunship Operations ................................................... 93
Tactical Analysis ....................................................... 93
Computer Operations ................................................ 98
Air Operations .......................................................... 102
Sensor Surveillance ................................................... 104
Secure Voice ............................................................. 107
Laos Operations ......................................................... 109
Khmer Republic ........................................................ 110
Operation Pave Phantom Lead ...................................... 113
Helicopter Operations ............................................... 115
B-52 Operations ....................................................... 116
Surface Plans .......................................................... 121

FOOTNOTES .................................................................. 124

IV. LOGISTICS ............................................................. 126

Mission ......................................................................... 126
Engineer Division ........................................................ 127
Port of Kompong Som Reconnaissance ......................... 129
Command Interest Construction Projects ..................... 130
Mekong Convoys in Support of Khmer Republic ........... 132
Kompong Som Port Survey .......................................... 134
Interservice Support Agreement (ISSA) ......................... 134
Overseas Coordinating Group, Thailand ....................... 135
Meetings ..................................................................... 136
Staff Visit to DAO, RVN ........................................... 136
Drawdown of DAO Civil Service Personnel .................. 137
RVN Security Assistance Program ................................ 139
Location/Transfer of Communications Equipment ........ 140

FOOTNOTES .................................................................. 142

V. COMMUNICATIONS-ELECTRONICS .......................... 143

Satellite Terminal Operations ....................................... 143
Base Defense ............................................................ 144
Blue Chip Communications ......................................... 146
Communications Security Education Program ............. 148

FOOTNOTES .................................................................. 150
VI. JOINT CASUALTY RESOLUTION CENTER

Mission
Executive Functions
Administration
Comptroller
Operations
Casualty Data Division

FOOTNOTES

VII. HEADQUARTERS COMMANDANT

Commandant
Budget Officer
Headquarters Squadron Section

FOOTNOTES

GLOSSARY

ANNEX (History, Defense Attache Office/Saigon)
<table>
<thead>
<tr>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>FOLLOWING PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NVA Military Region 559</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>NVA Infiltration Routes</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>NVA Vehicle Flow</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>Estimated Tonnage of NVA Cargo</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>Entering Laos</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>NVA Infiltration Before and After Cease-Fire</td>
<td>27</td>
</tr>
<tr>
<td>7</td>
<td>Infiltration of NVA Armored</td>
<td>28</td>
</tr>
<tr>
<td>8</td>
<td>HQ USSAG/7AF Organizational Chart</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>Roster of Key Personnel as of 30 June 1973</td>
<td>29</td>
</tr>
<tr>
<td>10</td>
<td>USSAG J-3/Intelligence Organizational Chart</td>
<td>52</td>
</tr>
<tr>
<td>11</td>
<td>Significant BDA (April thru June)</td>
<td>59</td>
</tr>
<tr>
<td>12</td>
<td>Sortie Rates</td>
<td>97</td>
</tr>
<tr>
<td>13</td>
<td>Distribution of Sortie Rates</td>
<td>97</td>
</tr>
<tr>
<td>14</td>
<td>Alert Posture</td>
<td>103</td>
</tr>
<tr>
<td>15</td>
<td>Frag List for 25 April 1973</td>
<td>103</td>
</tr>
<tr>
<td>16</td>
<td>Frag List for 11 May 1973</td>
<td>103</td>
</tr>
<tr>
<td>17</td>
<td>Alert Posture</td>
<td>104</td>
</tr>
<tr>
<td>18</td>
<td>Flying Allocations</td>
<td>104</td>
</tr>
<tr>
<td>19</td>
<td>JCRC Organizational Chart</td>
<td>153</td>
</tr>
<tr>
<td>20</td>
<td>MIA Chart as of 30 June 1973</td>
<td>153</td>
</tr>
<tr>
<td>21</td>
<td>BNR Chart as of 30 June 1973</td>
<td>153</td>
</tr>
<tr>
<td>22</td>
<td>SEA Crash Site Chart</td>
<td>153</td>
</tr>
</tbody>
</table>
CHAPTER I
MISSION AND RESOURCES
MISSION

FUNCTIONS

(U) The mission of the United States Support Activities Group/Seventh Air Force (USSAG/7AF), under the command of General John W. Vogt, remained virtually unchanged during this reporting period. The only significant alteration of the mission previously reported was the cessation of the air campaign in Laos.¹ Although air operations were restricted to Cambodia, the Commander, USSAG (COMUSSAG) continued to plan for the resumption of effective air support in Laos, and North and South Vietnam when directed by proper authority. The COMUSSAG/7AF also continued to maintain a command and control structure for the management of air elements which might be committed to it, to include the capability for interface with the Vietnamese Air Force (VNAF) control system. Additionally, the COMUSSAG/7AF continued to maintain liaison with the Republic of Vietnam Armed Forces (RVNAF), Joint General Staff (JGS), Carrier Task Force 77 (CTF-77), and committed Strategic Air Command (SAC) elements; and to exercise operational control of the Joint Casualty
Resolution Center (JCRC) and the Defense Attache Office (DAO), Saigon.*

**USSAG/7AF STATUS QUERIED**

On 15 March 1973, the Joint Chiefs of Staff (JCS) tasked the Commander-in-Chief Pacific Command (CINCPAC) to provide comments and recommendations on targeting and tasking of all United States (US) air assets, plus a recommendation on whether USSAG/7AF should be disestablished, retained, or modified. ²

On 18 March, COMUSSAG/7AF was requested to provide input to CINCPAC.³ On 9 April, General Vogt informed CINCPAC that the possible options for a changed status of USSAG/7AF were evaluated, and that the position was that it would be unwise to disestablish or modify the headquarters at that time. It was pointed out that the options studied showed cost and manpower savings, however, each presented deficiencies which would be militarily unsound in light of the then existing situation in Southeast Asia (SEA). Apropos that, the withdrawal from Thailand should be event-phased rather than time-phased. Events throughout SEA did not warrant reducing US capabilities to conduct actions which might be required at any time with very little notice. There

² See USSAG/7AF History, 15 Feb-31 Mar 73, pp 5-10
was no cease-fire in Cambodia, and the number of attacks by fire and ground contacts had increased to a level more than double the December 1972 level. The ground situation throughout SEA was unstable, and fighting continued in the Republic of Vietnam (RVN). The threat to friendly forces in Laos, Cambodia, and the RVN had not appreciably decreased since the cease-fire in the RVN. The North Vietnamese Army (NVA) had used this time for resupplying their forces and increasing their strength. Infiltration of personnel and equipment continued at a level similar to that of a year ago thereby sustaining the enemy capability to resume full scale fighting in RVN if desired. Air operations declined throughout SEA after the cease-fire in RVN and Laos, but there had been a recent uptrend due to activities in Cambodia. United States statutory obligations dictated on the scene monitoring of security assistance activities for as long as US aid was provided the RVN. Since the mission of USSAG/7AF remained unchanged, the functions and responsibilities of the headquarters would remain unchanged for an indefinite period of time.\(^4\)

Pointing out the advantages of retaining the headquarters, General Vogt noted that:\(^5\)
The continued presence of USSAG/7AF and committed forces acts as a military deterrent and reflects US resolve to enforce the terms of the cease-fire agreement.

The visible presence of USSAG/7AF helps reinforce confidence of Asian allies in US commitments.

Time would be provided for the situation to stabilize in SEA.

The US could observe events which transpired following the withdrawal of US forces from RVN and the exchange of prisoners of war.

The effectiveness of the cease-fire in Laos could be assessed.

Evaluation indicated that NVN might continue to violate the cease-fire, therefore it was imperative that USSAG/7AF maintain its capabilities to resume effective combat operations if required.

A joint and responsive command relationship would be retained while the conditions in SEA remained turbulent and uncertain.

Fragmenting responsibilities which would adversely affect future military operations should be avoided.

Manpower would continue to be available for effective and efficient management of committed military resources if the situation deteriorated further.

A better assessment of the magnitude of the JCRC mission would be possible.

Initial planning, operations, and coordination of support were best provided under existing command relationships.
Continuing USSAG/7AF contact with the RVNAF JGS, through DAO, demonstrated continued US support, provided an alternative means of monitoring security assistance operations, and provided an essential link for any further major combined operation.

In conclusion, General Vogt stated that current events and intelligence indicated that the Democratic Republic of Vietnam (DRV) had, since the cease-fire, developed the capability to resume full scale hostilities in RVN and Laos. Their rapid build-up of a major base at Khe Sánh amply reflected enemy intentions to maintain a substantial capability in RVN. Therefore, a joint headquarters should be retained at Nakhon Phanom (NKP) Royal Thai Air Force Base (RTAFB), Thailand, to maintain the capability to resume an effective air campaign in Laos, Cambodia, RVN, and NVN, and to conduct JCRC operations. COMUSSAG/7AF further stated that his organization must have the most effective and efficient command structure possible.

In his recommendations, General Vogt advocated the retention of the headquarters in its present structure until the military situation stabilized and DRV demonstrated their intent to conform to the provisions of the cease-fire agreement. At that time the situation indicated that this would be at least X day plus 9 to
12 months. Immediately upon reasonable indications that the situation could be stabilizing, the requirement for USSAG/7AF and the options for its modification could be re-evaluated. General Vogt also recommended that his authority be expanded to include targeting and tasking for all US air assets, including SAC, Marine, and US Navy, in Laos, Cambodia, RVN, and Route Pack I of NVN. This would insure the most effective application of air capabilities in support of the ground situation in those areas. COMUSSAG/7AF further recommended that he be designated as the coordinating authority for all combat air operations in NVN. Coordination would be through the existing air coordinating committee. Coordinated operations would result in maximum destruction of the enemy targets as well as saturation of his defenses with a resultant decrease in friendly losses.7

**Air Operations in Cambodia**

In response to a query from the Chief of Staff, US Air Force (CSAF) regarding air operations in Cambodia, USSAG stated that the American Embassy (AMEMB), Phnom Penh, received ARC LIGHT* target validation requests from two sources—the Forces

* B-52 operations in SEASIA.
Armees Nationale Khmer (FANK) and USSAG. FANK requests were processed through the Embassy Target Panel composed of the Deputy Ambassador, Senior Military Representative, a Deputy Attache Officer, and a Political/Military Counselor. Each proposed target box was plotted on a 1:50,000 scale chart to ascertain required distances from inhabited areas, religious shrines or monuments, non-combatants or friendly combatants. All knowledgeable sources were queried concerning intelligence. If there was any question concerning adherence to established Rules of Engagement (ROE), 7AF was requested to perform visual reconnaissance of the specific target area. Final target validation/Embassy/7AF strike approval was granted only after it had been determined that the request was in full compliance with the ROE. USSAG target validation requests were subjected to ROE examinations prior to submission to the AMEMB. When visual reconnaissance (VR) was accomplished, the VR report was included with the validation request. Where the target area of interest was in or near FANK controlled territory, target information was compared with information available to AMEMB/DAO. If no conflict existed, the request was submitted for FANK approval. FANK approval authority was confined to the Assistant Chief of Staff for
Operations or the Deputy Chief of Staff.\(^8\)

The Ambassador and FANK Chief of Staff agreed upon the following:\(^9\)

- B-52 strikes were authorized throughout the FREEDOM DEAL* area. USSAG submitted requests to AMEMB. AMEMB secured FANK approval and forwarded that along with their approval to USSAG.

- Tactical air (TACAIR), controlled by Forward Air Controller (FAC), and spectre gunship strikes were authorized throughout FREEDOM DEAL except for clearly specified areas. No further clearance was required from AMEMB or FANK.

FAC control was required by 7AF for all air strikes in the Khmer Republic except for F-111 and B-52 all weather deliveries. JCS required FAC delivery only in the five mile positive control area (PCA) of FREEDOM DEAL, however, the Commander, 7AF directed FAC control in all areas to preclude collateral damage and optimize strike effectiveness. Immediate air strikes, except for F-111 diverts, were validated by the Ambassador's representative at Area Control, located in the US Embassy at Phnom Penh, as well as the FANK prior to being passed to 7AF. At Area Control, the strikes were plotted on 1:500,000 scale charts from the information provided by the FAC/ground commander prior to

* The central northeast region of Cambodia.
approval. Upon receipt at 7AF, the strikes were again validated against the ROE and were approved or disapproved by 7AF. F-111 divers were validated in exactly the same manner by FANK and AMEMB, but did not require 7AF validation. F-111 immediate divers were flown only on fully certified ground positioned beacons which were precisely located by SENTINEL LOCK, and fully certified as to their operational status by line drops and accuracy confirmed by photo bomb damage assessment (BDA). F-111 alternate targets were validated ARC LIGHT targets in FREEDOM DEAL. They were struck when the F-111 crew could not contact Area Control prior to dropping on their primary beacon target, when they could not receive the beacon, or when there was no validated immediate target provided by Area Control. Target requests, target selections, and validation processes complied with JCS directives and involved clearance by the Khmer Republic, AMEMB, and 7AF. 10

LAOS STATUS

A comparison of Lao armed forces military operational capabilities as of the 22 February cease-fire, and those of 30 June revealed a decline in combat effectiveness of inactive ground troops. The Lao Air Force, although flying less, remained operationally capable. The Lao were struggling to take over several
functions that had been performed by US air contractors, whose services were sharply reduced at the start of Fiscal Year (FY) 1974. The changeover to a smooth and efficient logistics system in-country was proceeding slowly as fewer Americans work in that field. US mission elements, while reduced in strength, had basically retained their operational capability. Efforts to develop Lao military self-sufficiency had highlighted several key problem areas which, while impairing immediate Royal Lao Government Armed Forces (RLGAF) operational capabilities, was thought to be amenable to solution over a longer term.  

In the weeks before the cease-fire, the US was supporting the largest friendly force of combat units ever fielded in Laos; 142 infantry battalions and 7 artillery battalions consisting of approximately 47,200 troops. The force had undergone an intensive retraining effort during the last half of calendar year (CY) 1972, when 45 Lao infantry (LIF), 20 Thai and 21 Forces Armees Royaume*/Forces Armees Neutre^ (FAR/FAN) battalions were cycled through an 8-10 week US supported training program. Equipment levels were at an all-time high prior to the cease-fire because the retrained units were also refitted.  

* The rightwing component of the Royal Laotian Army.  
^ Laotian Neutralist Army—supports Royal Laotian Government.
Combat effectiveness was another matter. Performance was often inadequate because of shortcomings in supporting fire, the RLGAF logistics support system, leadership, and morale. Moreover, the enemy was able to exploit his ability to mass greater numbers and firepower. The RLGAF depended heavily on US Air Force TACAIR and B-52 support. One knowledgeable evaluator considered only 18 of the 56 deployed FAR/FAN battalions to be combat ready, and many of the LIF battalions were woefully undermanned. These shortcomings notwithstanding, the enemy had been driven out of Sala Phu Khoun and the siege of Long Tien and Boum Long had been lifted. Friendlies had also retaken Paksong in a major victory. These successes, at a time when the enemy had dedicated itself to a strong, country-wide land grab, were the key reasons why, in the opinion of the USSAG Commander, the enemy finally agreed to negotiate.

Four months after the cease-fire, indigenous combat force levels had remained unchanged. But total friendly combat strength dropped because, in anticipation of withdrawal, the AMEMB was directed not to offset Thai Special Guerrilla Unit (SGU) troop contract expiration by recruiting. By mid-June, the deployed combat units totaled 132 infantry battalions and 7
artillery battalions consisting of 42,700 troops. After a virtual three-month holiday during which only one FAR infantry battalion and two FAR artillery battalions were retrained, the LAO realized the need to resume training. As of 30 June, 11 FAR (integrated LIF) battalions were in training. No Thai SGU battalions were retrained, except for in-place refresher activities. Equipment levels for all forces remained at the pre-cease-fire levels.14

Combat effectiveness dropped. Vigilance lessened and, with few exceptions, the RLGAF were more defensive-minded. All units suffered from a lack of activity. In some locales, more liberal leave policies were put into effect, which boosted morale, but which sharply reduced the actual deployed strength of both Thai and Lao. On the other hand, many Lao irregulars viewed with apprehension their integration into FAR because of possible eventual resultant loss of special bonuses, and the difficulty of rank integration. Overall, morale was satisfactory, primarily because the killing had all but ceased.15

Since the peak effort at time of cease-fire, utilization of Royal Lao Air Force (RLAF) combat and combat support aircraft (T-28, AC-47, O-1, and H-34)
had declined. For example, during the four month period following the cease-fire, in-country T-28 employment dropped from over 50 to under 10 flying hours per aircraft per month. T-28 combat sorties plummeted from a pre-cease-fire monthly average of 3,557 to 62 during June. Pilot flying hours also dropped significantly, with some below acceptable minimums. Nonetheless, should heavy fighting break out, RLAF could shortly resume combat sorties at the pre-cease-fire rate. Basically; however, the RLAF had been using the post-cease-fire period to refine and rehabilitate its organization. A proficiency training program, covering all flying phases, was about to begin. While new pilot/mechanic/flight crew training continued at Savannakhet and Udorn, construction of a new maintenance facility was begun in Vientiane. But it remained to be seen how long it would be before the RLAF could perform, in-country, the maintenance functions heretofore performed at Udorn by Air America and Detachment 1, 56th Special Operations Wing.\(^{16}\)

Efforts would continue to have the RLAF assume more of the cargo hauling as air contract services were phased down. The RLAF had, since 1 June, taken over sole operation of six C-130 aircraft.
from Air America, and was to receive the remaining four aircraft on 1 October. As crews and mechanics were trained, the utilization of the aircraft improved; however, the allocation of various aircraft (including H-34s and the remaining C-47s) and the management of traffic were problem areas that required considerable attention so that the regions and forward operating locations would be serviced efficiently. It was envisioned that the RLAF would eventually be able to meet most if not all RLGAF airlift requirements.\textsuperscript{17} 

As instructed, the AMEMB retained contractor resources at cease-fire levels, except for minor deviations approved through FY 73. This retention of capability resulted in a sizeable expenditure for hours which were not flown due to no requirement, but for which contracts guaranteed payment estimated at $622,000. For FY 74, the AMEMB proposed a substantial reduction in contract air services. The proposal was approved and contract coverage was obtained for the first quarter of FY 74.\textsuperscript{18} 

Considering pipeline lead time, plus quantities on hand and in Thailand, the stockage situation was quite good. With regard to the key items of ammunition, there were approximately 25 combat days of stocks on
hand in Laos, plus approximately 60 combat days of air munitions and 90 combat days of ground munitions in Thailand. The proposed FY 74 force level could be supported. In the event of increased combat activity, greater requirements could be met with priority airlift.19

Before the cease-fire, the Requirements Office (RO) of the US Agency for International Development (USAID)—with 41 US, 100 third-country, and 375 local personnel—was the backbone of the FAR logistics system. Special Reporting Force (SRF) personnel operated a separate system for Lao irregulars and Thai SGUs. Accelerated reorganization, streamlining and consolidation efforts aimed at Lao self-sufficiency, had been underway since the cease-fire. As of 30 June the RO was manned by 15 US, 92 third-country, and 102 local personnel. The SRF reduced its logistical staff, and some US Military Assistance Command, Thailand (MACTHAI), personnel were commuting each day to smooth the transition. This changeover was slow and impaired the RLGAF logistics capability.20

Both the US Air Attache and US Army Attache retained approximately the same strengths as pre-cease-fire and maintained their operating capabilities. American FAC (Ravens) strength remained
at the 1 April level of eight, which was considered sufficient to meet an initial outbreak of hostilities when coupled with 20 Lao FACs, 6 of whom were certified to control US air strikes; however, no Ravens have flown over Laos since the cease-fire. As a result, familiarity with their operating areas declined.

The fighting in Laos has all but stopped. While, in the four months since the cease-fire, there had been a marked change in Lao military operational capabilities, the US mission had gradually reduced its presence and had shifted its efforts to prepare the Lao for greater responsibility. As of 30 June the Lao were struggling with several new tasks that would have to be performed on their own or, at least, with much less American assistance. During the transition, several key problem areas were highlighted and the RLGAF combat readiness had declined. The success in overcoming the problems would depend ultimately on the Lao themselves.

**TRIPARTITE DEPUTIES CONFERENCE**

The Tripartite Deputies met in an executive session at Headquarters FANK in Phnom Penh on 22 June 1973. Senior representatives were chairman Lt Gen

* A monthly conference attended by Deputy Commanders of RVNAF, FANK and USSAG.
Nguyen Van Manh, RVNAF; Maj Gen Thongvan Fanmuong, FANK; and Maj Gen Howard H. Cooksey, USSAG. Also in attendance were Brig Gen John Cleland, Chief, Military Equipment Delivery Team, Cambodia; Maj Gen Mao Sum Khem, Assistant Chief of Staff, Logistics, FANK; Commodore Vong Sareny, Chief of Staff, Khmer Navy; Brig Gen Penn Rasnda, Chief of Staff, Khmer Air Force (KAF); Col Uk Sauv, Chief, J-3, FANK; Brig Gen Nguyen Thanh Hoang, Deputy Commander, Military Region (MR) IV, RVN; and Brig Gen Tran Dinh Tho, Chief of Operations, RVNAF. The following matters were discussed:

- Convoy Operations.
- Improvements in Communications Security (COMSEC) Procedures.
- Khmer Refugees in the RVN.
- Status of the 32nd Brigade.
- Status of Resupply in the Khmer Republic.

With regard to convoy procedures, it was announced that proposals concerning political/economic issues were submitted to the respective governments and agreed that procedures adopted by the Tripartite group would continue in effect until a government level decision was reached. Also, it was agreed that FANK and RVNAF would review convoy procedures to
determine if changes were required for operations during the rainy season.

The scheduled briefing on improved COMSEC procedures was not presented. However, improved procedures recommended by the study group were discussed. It was agreed that a brevity code would be developed for convoy operations; that a river checkpoint system would be revised before each future convoy; and that maximum use would be made of the KAC code for targeting purposes. The placement of armed teams on merchant ships and the use of alternate assembly areas were still being considered. The study group had made excellent progress and, provided recommendations were implemented, improved convoy security would result. The study group would continue its review of the COMSEC problem.

In response to General Manh's request on the status of Khmer refugees in RVN, General Hoang stated that the total of controlled refugees was 8,000 located in the area of Tinh Bien. However, an additional 14,000 refugees were living with friends and relatives. General Manh requested that all refugees be brought under government control because of the danger of communist infiltrators being included among them.
Problems concerning transportation and supplies for the refugees were discussed with FANK representatives, indicating that no decision on movement date or destination in the Khmer Republic (KR) had as yet been made.

Concerning the status of the 32nd Brigade, it was determined that 200 to 300 troops remained at the RVN/Khmer border. The remaining troops were ineffective at their present location and were to be moved as soon as transportation was available. KAF helicopter support intended for this purpose was diverted to support Route 4 clearing operations.

The supply situation in the KR was discussed in detail. A serious potential shortage of rice, possibility of increasing frequency of supply convoys, and plans to improve ammunition stockage levels in isolated areas were highlighted.

At the conclusion of the executive session, during an informal discussion, the US representative was asked about the future of US air support to the KR. The then current status of US congressional deliberations was presented in general terms. The situation was depicted as serious; however, no predictions were made. The RVN and Khmer representatives
were quite obviously concerned over the possibility of a cessation of US air support to the KR. The US representative recapped USSAG recommendations previously made to the Commander-in-Chief of the Khmer Armed Forces concerning the priority need to regain control of the west bank of the Mekong River, to improve security along Route 4, and to reopen Route 5, along with US plans to intensify the US air campaign against enemy forces concentrating in the environs of Phnom Penh. An expected Khmer request for VNAF support was not made. This was the most positive and frank discussion the present US representative had observed between the Khmer and the RVN in these meetings. The RVN representatives, especially, reflected a level of understanding, helpfulness, and cooperation heretofore unobserved.

In discussing the agenda for the next conference, a request was made for a US briefing on 7AF air activities. A tentative agreement was given with the provision that the briefing be presented during the executive session only. (A suitable briefing could be presented within the security limitations of the Tripartite Deputies meeting). The following agenda was adopted for the July meeting which was to be held on 20 July in Phnom Penh with the US representative as chairman:
- Air Ground Mekong Riverine Operations (VNN).
- Radio Communications Security (RVNAF).
- Coordination of Operations in the Border Area (RVNAF).
- Briefing on the Military Situation in RVN (RVNAF).
- Briefing on the Military Situation in the KR (FANK).
- Briefing on 7AF Air Operations (USSAG).

(U) The following briefings were presented during the regular session on 22 June:
- Air Ground/Mekong Riverine Operations.
- Coordination of Operations in the Border Area.
- RVNAF/FANK Radio Communications.
- Military Situation in RVN.
- Military Situation in the KR.
- USSAG Briefing on Enemy Logistical Activities since the Cease-Fire.

The Air Ground/Mekong Riverine study group convoy schedule for the remainder of June and for July was approved. The Chairman announced that the KR/RVN bilateral accords of 1971 were being reviewed by both governments. Pending the outcome of this review, the then currently approved convoy procedures would continue to be followed.

The bilateral study group report on coordination
of border activities eliminated reference to the US. The report was approved with a minor addition to insure prior coordination by units of one country seeking refuge in the other.

The report of the study group on FANK/RVNAF communications outlined requirements and assets available and proposed measures to improve voice and teletype communications systems between forces of the two countries. The report recommended activation of major segments of the improved system at 0800 hours on 1 July 1973. The report was approved and the study group was commended by the Deputies for its comprehensive, practical solution to this important problem.

The USSAG presentation on enemy logistic activities was well received. The briefing, which follows, was designed to give an update on:

- The Structure of the North Vietnamese Infiltration and Logistics System.
- Corridors Used to Move Men and Supplies Southward.
- Maintenance and Improvement Activities on These Routes.
- Vehicle Activity Noted, Including Trucks, Armored Vehicles and Artillery.
- Movement of Personnel and Supplies Through the System This Year.

MR 559, the NVA's rear services organization,
was responsible for the movement of men and materiel from North Vietnam southward through Laos into the RVN and the KR. MR 559's area of operation included Quang Binh Province, North Vietnam, the eastern Laotian Panhandle, contiguous RVN border areas, and had moved deep into the KR, at least as far south as Kratie. MR 559 was broken down into group areas; each group being responsible for maintenance, repair, and protection of lines of communication (LOC), and for the movement of men and materiel through a given geographical area. The group functions were performed by the Binh Tram or Military Station; a regimental size entity containing its own antiaircraft artillery, engineer, transportation, and communications-liaison units. (See Figure 1)

Since January 1973, a major reorganization and realignment took place within the MR 559 system. A new group was formed, areas of responsibility expanded, and many Binh Trams transformed into specific combat support units such as engineers, infantry, antiaircraft artillery, or transportation regiments. Traditionally, personnel infiltrating from North Vietnam into Laos generally entered through the Mu Gia, Ban Karai, and Ban Raving Passes. From the passes the traffic flowed.
south, either along the main western route corridor (via Routes 23, 16, etc.), or the main eastern corridor (via Routes 92, 96, 99 etc.). Cargo destined for enemy units within the KR generally moved west from Stung Treng into MR 4, or continued south along Route 13 to Kratie where it moved west, or continued south to base areas 353 and 354 where it was sent to areas south and west of Phnom Penh. (See Figure 2)

Analysis of aerial photography indicated that the North Vietnamese were engaged in a major road building effort in southern Laos. Photographs showed several small segments of highway construction along the length of the Panhandle. Some existing roads were being widened and realigned while new ones were being built. These segments were dual lane (20 - 24 feet). Drainage ditches were present and some gravel surfacing was underway. Because of the similarities in design of the segments, the possibility exists that they would eventually be linked to provide an all-weather high capacity road from the passes to the Lao/KR border. The construction and use of this highway would increase the NVA resupply capability through southern Laos, and indicated an intent to maintain a supply line through the Panhandle for the foreseeable future.

In addition to the traditional route system
through the Laotian Panhandle, the North Vietnamese developed a major road system within the northwestern portion of the RVN. This system would enable them to move men and materiel from North Vietnam to as far south as Kontum Province in the B-3 front. Although not as extensive as the Laotian network, use of the new corridor would provide substantial savings in transit time for cargo and personnel, as well as provide the NVA with an all-weather capability at least as far as northern MR 5. Future extensive use of this route could be expected as it provided ready access to all major destinations from the Demilitarized Zone (DMZ) to the highlands.

Since the cease-fire on 28 January, vehicle and logistical activity has been heavy throughout the Panhandle. Sensor detected movers during this period totaled over 19,000 vehicles moving both north and south through the passes, and within areas of southern North Vietnam and Central Laos. Although the sensor figures were only a sampling and included tracked vehicles as well as trucks, they did indicate traffic flow. Traffic reached its peak in March and April, and then began to decrease. This decrease was probably a result of the onset of the Southwest Monsoon. The rains caused logistics movement to decrease rapidly until late
SENSOR DETECTED MOVERS SINCE JANUARY

JAN | FEBRUARY | MARCH | APRIL | MAY | JUNE

2000 - 1800 - 1600 - 1400 - 1200 - 1000 - 800 - 600 - 400 - 200

10,000 NORTHWARD
9,000 SOUTHWARD

Figure 3
<table>
<thead>
<tr>
<th>MONTH</th>
<th>INPUT (TONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB</td>
<td>10,000</td>
</tr>
<tr>
<td>MAR</td>
<td>12,000</td>
</tr>
<tr>
<td>APR</td>
<td>8,900</td>
</tr>
<tr>
<td>MAY</td>
<td>5,100</td>
</tr>
</tbody>
</table>

TOTAL SINCE CEASEFIRE: 36,000
June, when the accumulation of rain saturated the soil and made most roads impassable. In support of the sensor detections, photography revealed over 15,200 trucks in the Laotian Panhandle during the February-May time frame. (See Figure 3)

Based on sensor figures alone, since the cease-fire, at least 36,700 tons of cargo have arrived in the DMZ and Military Region Tri Thien Hue, and 36,000 tons have entered the Laotian Panhandle. This cargo consisted primarily of munitions and other war related material. Additionally, sizeable quantities of supplies were also being built-up just north of the DMZ, making them readily available for transshipment into Quang Tri and/or down through the Laotian Panhandle. (See Figure 4)

The 1973 infiltration estimate, as of June, was 64,000 personnel with 19,700 destined for the DMZ/MR Tri Thien Hue; 7,800 for Military Region 5; 10,900 for the B3 front, and 25,600 for RVN's MRs 3 and 4 and for the KR. Infiltration activity prior to the cease-fire consisted primarily of battalion sized infantry replacement groups and artillery/antiaircraft artillery (AAA) associated groups. After the cease-fire however, the input of those types of groups declined
significantly. (See Figure 5) Approximately 51,000 personnel infiltrated prior to the cease-fire. An estimated 12,700 of those reached their final destinations by 28 January with the remaining 38,300 continuing to move through the system. Since the cease-fire, approximately 13,000 personnel have begun infiltrating south. At least 4,400 were specialists such as civil administrators, technicians and military specialists. The remaining 8,600 were infantry replacements. (See Figure 6)

It appeared that infiltration of battalion size groups to the B3 front, KR, and RVN MRs 3 and 4 had, at least temporarily, ceased. Each year, at the beginning of the rainy season in south Laos, a marked reduction of infiltration into those areas occurred, but the system always retained the capability to move some personnel south. While heavy rains tended to restrict movement of large numbers of personnel through the southern portion of the system, the North Vietnamese retained the capability of moving personnel into northern RVN. After a pause of two months, battalion size groups were again moving through the system enroute to the Tri Thién Hue area. The availability of the new route corridor in northwestern RVN would
INFILTRATION ACTIVITY

BEFORE CEASEFIRE
*PRIMARILY BII SIZED INFANTRY REPLACEMENTS AND ARTY/AAA
ASSOCIATED GROUPS

*51,000 PERSONNEL ENTERED SYSTEM
  • 12,700 AT FINAL DESTINATIONS.
  • 38,300 CONTINUED THROUGH SYSTEM

AFTER CEASEFIRE
*13,000 PERSONNEL ENTERED SYSTEM
  • 4,400 SPECIALIST
  • 8,600 (ALL EN ROUTE TO DMZ/HR TTH)
enable the NVA to move directly across the DMZ, thus avoiding the heavy rains in southern Laos.

This year was also characterized by the infiltration of an unprecedented number of armored vehicles and artillery and AAA units. A total of 345 tanks, 178 artillery weapons and 151 AAA guns were noted moving south. These heavy weapons were seen moving south through the logistics system beginning October 1972, well before the cease-fire, and had probably reached their final destinations by March or April of this year. Armor has again been noted moving south through southern Laos. Photography of 4 June showed 14 tanks south of the Ban Karai Pass. Those tanks were following, by nearly four months, the main push southward of approximately 400 armored vehicles. The mixed composition (T34, T54, PT 76) indicated that they might be spares or replacements. (See Figure 7)

From the activity in southern Laos, the RVN, and the KR since the cease-fire, it was noted that the North Vietnamese were maintaining their elaborate logistics and infiltration system, and that they continued to use and improve upon that system. Although this activity would probably decrease during the rainy season, the system would still retain the
capability for the movement of large quantities of supplies and personnel through Laos and into the RVN and the KR.24

**ORGANIZATION**

(U) The organizational structure remained the same as reflected in the previous reporting period. (See Figure 8)

**RESOURCES**

**CHANGES IN KEY PERSONNEL**

(U) Several changes in key personnel took place during this reporting period. Maj Gen James D. Hughes replaced Lt Gen Carlos M. Talbott as Chief of Staff on 6 April; Brig Gen Hilding L. Jacobson Jr., replaced Maj Gen Eugene L. Hudson as Assistant Chief of Staff, Intelligence on 4 May 1973; Col Frank A. Wall replaced Col Telford S. Eggleston as Assistant Chief of Staff, Communications-Electronics on 6 June 1973; Rear Admiral Henry P. Glindeman Jr., replaced Rear Admiral Owen H. Oberg as Chief, Fleet Coordinating Group on 13 June 1973; and Col Wallace Wessel was assigned as the USSAG Inspector General on 25 June 1973.25 (See Figure 9)

**ADMINISTRATION OF MILITARY JUSTICE**

(U) Establishment of procedures and channels for administration of non-judicial punishment and courts
ROSTER OF KEY PERSONNEL AS OF 30 JUNE 1973

Commander
Deputy Commander
Chief of Staff
Asst C/S Personnel
Asst C/S Intelligence
Asst C/S Operations
Asst C/S Logistics
Asst C/S Comm-Elect
Headquarters Commandant
Inspector General
Secretary, Joint Staff
Public Affairs Officer
Commander, JCRC
Chief, Fleet Coord Group

John W. Vogt, General, USAF
Howard H. Cooksey, Maj Gen, USA
James D. Hughes, Maj Gen, USAF
Thomas U. Harrold, Col, USA
Hilding L. Jacobson Jr., Brig Gen, USAF
Jack Bellamy, Brig Gen, USAF
Stan L. McClellan, Brig Gen, USA
Frank A. Wall, Col, USAF
Ian D. Rothwell, Col, USAF
Wallace WesSEL, Col, USMC
B. R. King, Lt-Col, USAF
Donald J. Peterson, Lt Col, USAF
Robert C. Kingston, Brig Gen, USA
Henry P. Glindeman Jr., RADM, USN

Figure 9
martial jurisdiction for USSAG, JCRC, and DAO, Saigon, was nearly completed by the end of the reporting period. On 5 May 1973 the Commander-in-Chief United States Army Pacific Command (CINCUSARPAC) announced that Department of the Army personnel assigned to the three organizations would be attached to Headquarters, United States Army, Japan, for administration of Military Justice.26 On 15 June, USSAG requested CINCUSARPAC to consider attaching the units to United States Army Support, Thailand (USARSUPTHAI), which had general courts martial jurisdiction over Army personnel throughout Thailand.27 USARSUPTHAI concurred with the request, provided that USSAG appointed an Army element Commander for Article 15 purposes.28 Both JCRC and DAO, Saigon, were commanded by Army general officers who could administer Article 15 punishment in accordance with Army Regulation 27-10. As of 30 June, a reply had not been received from United States Army Pacific Command (USARPAC) regarding the attachment of units.

(U) Procedures for Naval personnel were established by the Commander-in-Chief, Pacific Fleet (CINCPACFLT), and the Commanding General, Fleet Marine Force, Pacific (FMFPAC).29, 30 Commanders of the three organizations were to designate a Naval unit within
the command and designate a commissioned officer of
the Naval service as Commanding Officer of the unit
for administration of Article 15 punishment. In the
event a matter occurred where courts martial action
was indicated, the Commanding Officer was to contact
CINCPACFLT or FMFPAC, as appropriate, for guidance. On
4 June, Commander Frederic N. Howe Jr., was designated
the first Commanding Officer of the USSAG US Navy
element.

(U) Air Force personnel in the three organizations
were assigned to Detachment 11, 1131st USAF Special
Activity Squadron, and Article 15 punishment was
administered by the Headquarters Squadron Section
Commander of Det 11. Courts martial jurisdiction was
exercised by the 56th Special Operations Wing and 13th
Air Force.

ADMINISTRATION OF US ARMY PERSONNEL

(U) On 2 May, CINCUSARPAC outlined its concept
of administration of US Army personnel assigned to
USSAG, JCRC, and DAO, Saigon. Essentially, USSAG and
JCRC were to assume responsibility for all personnel
administration, with USARSPUTHAI providing financial
support; USARSPUTHAI would continue to provide complete
personnel and financial support to Army personnel
assigned to DAO, Saigon. USSAG protested to
CINCUSARPAC that the concept would require an additional five or six Joint Table of Distribution (JTD) authorizations; and that the concept was in conflict with Joint Chiefs of Staff Publications 2 and 3 which specify that administrative support of a joint headquarters was to be provided by the nearest component service. USSAG accepted the responsibility for personnel requisition actions. On 8 June, USARPAC concurred with this position, and by the close of the reporting period, USARSUPTHAI and USSAG personnel offices were working to formalize detailed procedures for personnel administrative support of Army personnel.

RETURN OF VIETNAM ABSENTEES AND DESERTERS

(U) Upon verbal request for assistance from DAO, Saigon, USSAG queried CINCPAC and Pacific Service Components for disposition instructions for military personnel "dropped from rolls" (absentees and deserters) who were returned to military control in Vietnam. On 12 April, USSAG advised CINCPAC that the first probable deserter had been apprehended by Vietnamese authorities and requested instructions be expedited. USARSUPTHAI was temporarily appointed coordinating agent for prisoner return, and later given responsibility for coordinating return of all Vietnam absentees/deserters.
to USARSUPTHAI confinement facility at Camp Samae San. Service components were advised that confinement in Thailand must be kept to an absolute minimum period of time. On 9 May, CINCPAC relieved USSAG from the requirement to provide transportation for deserters from Vietnam to Thailand, and established priorities for transportation support.

ENVIRONMENTAL AND MORALE LEAVE FOR VIETNAM

(U) On 14 May 73, CINCPAC published a revised instruction concerning the environmental and morale leave (E&ML) program, and Vietnam was omitted as an authorized originating location. Upon receipt of the new CINCPAC instruction, DAO, Saigon, submitted a request to USSAG for authorization to allow their personnel to participate in E&ML. This program permitted space-available travel on Department of Defense (DOD) owned or controlled aircraft for military and civilian employees of the US Government to designated sites. USSAG submitted a proposal to CINCPAC which supported the DAO, Saigon, position.

On 15 June, CINCPAC approved E&ML for Vietnam with Honolulu, Manila and Bangkok authorized for visit.

OUT-OF-COUNTRY REST AND RECUPERATION (R&R) FOR SEA

(U) On 10 March, CINCPAC implemented a post
cease-fire out-of-country R&R program for personnel assigned in SEA, and tasked USSAG with administration of the program. Personnel were authorized to depart both Bangkok and Saigon for Honolulu and return, or with onward travel to the Continental United Status (CONUS) permitted at the individual's own expense. The program was designed to provide an R&R opportunity for personnel who accrued eligibility prior to the RVN cease-fire, and who remained in SEA after the redeployment of US Forces from the RVN. To be eligible, personnel were required to have served three months in the RVN, Cambodia, or Thailand prior to 28 March 1973, and to have three months remaining on their tour subsequent to that same date. Personnel assigned in Thailand were required to meet the additional criterion of having qualified for hostile fire pay for 90 consecutive days prior to 28 March 1973. Personnel authorized R&R under this criteria were required to complete all travel associated with the program by June 1973. R&R participants were transported via blocked seats on Military Airlift Command (MAC) commercial contract aircraft between Saigon, Bangkok, and Honolulu. The number of personnel who participated in the program follows:


<table>
<thead>
<tr>
<th>Country</th>
<th>Military</th>
<th>Civilian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Thailand</td>
<td>144</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Military</th>
<th>Civilian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Thailand</td>
<td>277</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>6</td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Military</th>
<th>Civilian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Thailand</td>
<td>384</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>5</td>
<td>26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Military</th>
<th>Civilian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Thailand</td>
<td>281</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>9</td>
<td>29</td>
</tr>
</tbody>
</table>

Total Participation: 1202 personnel

(U) On 7 April, USSAG proposed to CINCPAC that the out-of-country R&R program which terminated 28 March, be reinstated for those personnel who were still engaged in combat missions. On 7 May, CINCPAC authorized extension of the program for personnel permanently assigned in Cambodia and for personnel permanently assigned in Thailand who continued to be regularly engaged in combat missions. The out-of-country R&R program would continue until a complete cessation of US involvement in SEA hostilities.
INDIVIDUAL AND DEPENDENT BENEFITS FOR CIVILIAN IRREGULAR DEFENSE GROUP (CIDG).

On 8 May, DAO, Saigon requested guidance from USSAG concerning back pay for former CIDG personnel who were released as Prisoners of War (POW). These individuals petitioned the AMEMB, Saigon, for back pay for the time that they were held prisoner. On 12 May, another case was presented in which two widows of CIDG personnel who were killed in action (KIA) requested assistance from the AMEMB, Saigon. USSAG forwarded both requests to CINCPAC and recommended that USARPAC might be able to provide the required information. CINCPAC tasked USARPAC to provide the requested guidance; however, USARPAC responded with the fact that due to absence of personnel and finance records for CIDG personnel, it was incapable of providing a solution.

On 20 June, CINCPAC requested guidance from the JCS on this subject and recommended that the action be assigned to the Army Staff as an Army Special Forces problem. CINCPAC went on to state that this subject was of concern to the AMEMB, Saigon, and might be surfaced by the SECSTATE in the near future. As of 30 June, no response had been received from the JCS concerning the status of the problem.
IN-COUNTRY (THAILAND) MILITARY STRENGTH

USSAG/7AF

<table>
<thead>
<tr>
<th></th>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Off</td>
<td>Enl</td>
</tr>
<tr>
<td>Army</td>
<td>44</td>
<td>46</td>
</tr>
<tr>
<td>Navy</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Marines</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Air Force</td>
<td>217</td>
<td>244</td>
</tr>
<tr>
<td>Totals</td>
<td>274</td>
<td>300</td>
</tr>
</tbody>
</table>

JCRC

<table>
<thead>
<tr>
<th></th>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Off</td>
<td>Enl</td>
</tr>
<tr>
<td>Army</td>
<td>38</td>
<td>84</td>
</tr>
<tr>
<td>Navy</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Marines</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Air Force</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Totals</td>
<td>64</td>
<td>109</td>
</tr>
</tbody>
</table>

FLT COORD GP

<table>
<thead>
<tr>
<th></th>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Off</td>
<td>Enl</td>
</tr>
<tr>
<td>Navy</td>
<td>11</td>
<td>25</td>
</tr>
</tbody>
</table>

AWARDS AND DECORATIONS

(U) USSAG Regulation 900-3, Individual Awards and Decorations, was approved and published on 15 May. During this period there were 43 recommendations for the Joint Service Commendation Medal submitted to the USSAG Awards and Decoration Board, of which 19 were approved by the Board and Commander, USSAG.50

(U) On 29 June, a Unit Awards Panel convened at Udorn Royal Thai Air Force Base to review the unit awards recommendations on hand at 7th and 13th Air Force,
and to consider other units that were assigned or under operational control of 7th and 13th Air Force, from 1 January 1972 to 28 March 1973. The panel was comprised of four 7th AF, five 13th AF, and one 13th ADVON representatives. The panel of officers identified those units they recommended for further consideration. This submission was being prepared by 13th AF/DPY for approval by Commanders of 7th and 13th AF, prior to preparation of final unit award recommendations. Five unit award recommendations for units subordinate to 7th Air Force were prepared. Units involved were:

505th Tactical Control Group, Air Force Outstanding Unit Award (AFOUA); 377th Air Base Wing (AFOUA); 8th Special Operations Squadron, Presidential Unit Citation (PUC); 6498th Air Base Wing, (AFOUA); and the 6251st Air Base Wing, (AFOUA). The recommendation for the 505th Tactical Control Group was forwarded to CINCPACAF on 19 April 1973. The four remaining unit awards were in final processing stages prior to submission to PACAF.

OFFICER AND AIRMAN MANNING UNIT

(U) A major revision of the USSAG/7AF JTD required considerable effort to properly align personnel and verify previous requisitions. New requisitions, as required, were submitted to conform to the JTD. During this period, 44 new officers and 20 new airmen were assigned.
As of 30 June, 108 positions were identified as dual USSAG and 7AF functions, with the requirement reflected on the 7AF Unit Detail Listing. The reassignment of dual-hat personnel from USSAG to 7AF was in the process at the end of this reporting period.52

**Officer and Airman Assignment Unit**

(U) As a result of the heavy turnover of personnel assigned to Hq USSAG, this section reassigned 72 officers and 29 airmen to the CONUS, or to consecutive oversea tour areas. Also, during this period, this section notified 100 officers and 129 airmen of their assignments for July, August, September and October 1973. All actions were handled expeditiously and without incident.53

**Administration Branch**

(U) A review of 7AF publications was conducted which resulted in a 75 percent reduction of all 7AF publications. There were 40 publications produced, and 383 TDY orders published during this period. All DOD directives were ordered, received, and incorporated into the functional library. Additionally the following Headquarters Operating Instructions were authored and published:

- HOI 0-2, 25 June 73, Numerical Index of HOI's.
- HOI 5-2, 8 May 73, Staff Directory.
A pouch service was established with USARSUPTHAI to expedite Army personnel matters. During this period there were 1,788 accountable pieces of mail processed.\(^54\)

**USSAG/7AF INSPECTOR GENERAL**

(U) The Inspector General (IG) billet was filled on 25 June by Col Wallace Wessel, US Marine Corps.* The IG's mission was to assist the COMUSSAG in maintaining effective command and control, high standards of joint operational readiness, and an effective Operations Security (OPSEC) program for this headquarters and all tactical units over which COMUSSAG exercised operational control. The IG would, therefore, develop a program for evaluation of matters relating to those aspects of the command and control and provide timely reports to the COMUSSAG.

(U) It was not the purpose of this office to fulfill the responsibility of the individual service...

---

* See USSAG/7AF History, 15 Feb-31 Mar 73, pp 26-27.
IG system. Therefore, unit operational readiness, normal service complaints, deficiencies and recommendations should be more appropriately handled through service channels. However, this office was fully prepared to assist in resolving any problems, particularly within USSAG, which did not receive a sympathetic response elsewhere.

(U) Initial emphasis was to be placed on ROE and OPSEC as they related to current operations in Cambodia. The IG planned to follow the below outlined program in assuming his responsibilities:

- Receive a staff briefing on the functions and responsibilities of each of the staff agencies.

- Study and become familiar with all directives related to command and control, OPSEC, ROE, and joint operational readiness.

- Visit all tactical commands under the operational control (OPCON) of COMUSSAG, and receive briefings on command relationships, command and control, joint operational readiness, communications and operations security, and deficiencies presently identifiable.

- Promulgate a master schedule of inspections for USSAG and all tactical OPCON commands.

- Conduct inspections in accordance with that schedule and report the results and recommendations to the COMUSSAG.

- Coordinate these activities with the IG, 13th Air Force and 1st Marine Aircraft Wing, as necessary.
(U) It was not the intent of this office, in the conduct of its responsibilities, to interfere with normal operations. All inspections would be conducted under normal working conditions with a minimum of interruption. Any discrepancies noted would be brought to the immediate attention of the responsible agency for corrections. Reports would be made to the COMUSSAG, noting observed deficiencies and, where appropriate, corrective action taken. If corrective action could not be taken by the deficient agency, recommendations would be made to the COMUSSAG for his consideration.

(U) Every effort would be expended to ensure that an atmosphere of cooperation and mutual concern for improving efficiency and effectiveness throughout the command was maintained. 55
FOOTNOTES

CHAPTER I

1. Msg (TS), 7AF to 7/13AF, 221520Z Feb 73, Subj: SEASIA Rules of Engagement - Cease-Fire in NVN, RVN, DMZ and Laos (U), GDS-Dec 83.

2. Msg (TS), JCS to CINCPAC, 152000Z Mar 73, Subj: Changes in Existing Military Procedures in SEA (U), GDS-Dec 83.

3. Msg (TS), CINCPAC to USSAG/7AF, 180412Z Mar 73, Subj: Changes in Existing Military Procedures in SEA (U), GDS-Dec 83.

4. Msg (TS), USSAG/7AF, to CINCPAC, 090930Z Apr 73, Subj: Changes in Existing Military Procedures in SEA (U), GDS-Dec 83.

5. Ibid.

6. Ibid.

7. Ibid.

8. Msg (TS), USSAG to CINCPAC, 051140Z Apr 73, Subj: Air Operations in Cambodia (U), GDS-Dec 83.

9. Ibid.

10. Ibid.

11. Msg (S), AMEMB, Vientiane to SECSTATE, 120900Z Jul 73, Subj: Status of Military Capabilities in Laos from Cease-fire to June 1973 (U), GDS-Dec 81.

12. Ibid.

13. Ibid.

14. Ibid.

15. Ibid.
16. Ibid.
17. Ibid.
18. Ibid.
19. Ibid.
20. Ibid.
21. Ibid.
22. Ibid.
23. Msg (S), USSAG/7AF to CINCPAC, 301115Z Jun 73, Subj: Tripartite Deputies Conference, 22 Jun 73 (U), GDS-Dec 81.
24. Briefing (S), DEPCOMUSSAG to Tripartite Deputies, 22 Jun 73, Subj: Logistics Activities (U), GDS-Dec 81.
25. Rpt (S), USSAG/7AF (J-1), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.
26. Msg (U), CINCUSARPAC to USSAG, 050248Z May 73, Subj: Attachment of Units for Nonjudicial Punishment (U).
27. Msg (U), USSAG to CINCUSARPAC, 150937Z Jun 73, Subj: Attachment of Units for Nonjudicial Punishment (U).
28. Msg (U), CINCUSARPAC to USSAG, 200904Z Jun 73, Subj: Attachment of Units for Nonjudicial Punishment (U).
29. Msg (U) CINCPACFLT to USSAG, 250531Z May 73, Subj: Attachment of Units for Nonjudicial Punishment (U).
30. Msg (U) FMFPAC to USSAG, 251730Z May 73, Subj: Attachment of Units for Nonjudicial Punishment (U).
32. Msg (U) USSAG to CINCUSARPAC, 240100Z May 73, Subj: Military Personnel Admin Support for New Organization (U).


34. Msg (U) USSAG to CINCPCAC, 300930Z May 73, Subj: Return of Vietnam Absentees and Deserters (U).

35. Msg (U) USSAG to CINCPCAC, 121045Z Apr 73, Subj: Return of Vietnam Absentees and Deserters (U).

36. Msg (U) CINCPCAC to USSAG, 270410Z Apr 73, Subj: Return of Vietnam Absentees and Deserters (U).

37. Msg (U) CINCPCAC to USSAG, 092125Z May 73, Subj: Return of Vietnam Absentees and Deserters (U).

38. Rpt (S) USSAG/7AF (J-1), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.


40. Msg (U) USSAG to CINCPCAC, 130945Z Jun 73, Subj: Environmental and Morale Leave (U).

41. Msg (U) CINCPCAC to USSAG, 150313Z Jun 73, Subj: Environmental and Morale Leave (U).

42. Msg (C) CINCPCAC to USSAG, 100425Z Mar 73, Subj: Out-of-Country R&R Program (U), GDS-Dec 79.

43. Msg (C) USSAG to CINCPCAC, 070300Z Apr 73, Subj: Out-of-Country R&R Program (U), GDS-Dec 79.

44. Msg (C) CINCPCAC to USSAG, 072233Z May 73, Subj: Out-of-Country R&R Program (U), GDS-Dec 79.

45. Msg (C) DAO, Saigon to USSAG, 080215Z May 73, Subj: Individual and Dependents Benefits for CIDG (U), GDS-Dec 79.
46. Msg (C) DAO, Saigon to USSAG, 120720Z May 73, Subj: Individual and Dependents Benefits for CIDG (U), GDS-Dec 79.

47. Msg (C), USSAG to CINCPAC, 180747Z May 73, Subj: Individual and Dependents Benefits for CIDG (U), GDS-Dec 79.

48. Msg (C) CINCPAC to USARPAC, 230104Z May 73, Subj: Individual and Dependents Benefits for CIDG (U), GDS-Dec 79.

49. Rpt (S) USSAG/7AF (J-1), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.

50. Ibid.

51. Ibid.

52. Ibid.

53. Ibid.

54. Ibid.

55. Rpt (U) USSAG/7AF (IG), 1 Apr-30 Jun 73, Subj: Historical Report (U)
CHAPTER II
INTELLIGENCE

MISSION

The intelligence organization continued to perform vital functions in support of the USSAG/7AF mission during April through June 1973. During this period, Intelligence supported extensive combat air operations in Khmer, managed the vast SEA intelligence network in support of US national and theater objectives, and made detailed preparations for possible return to pre-Vietnam cease-fire operations. On 15 and 16 April, Intelligence supported limited combat air operations near Tha Vieng in Barrel Roll* and for a brief period of time it appeared the situation would escalate. By the end of April the situation in Laos had calmed down but intelligence support of extensive air operations continued in Khmer through the end of this reporting period. On approximately 15 June, the impending passage of the Eagleton amendment† dictated a maximum intelligence effort

* Nickname for Air Operations Area in northern Laos.
† Cessation of funds for support of all SEA operations by 1 July 1973.
to support the last 10 days of operations and a subsequent noninvolvement environment. By the end of June funds for support of SEA operations had been assured through 15 August, but the maximum intelligence effort continued. The role of USSAG/7AF intelligence remained critical to the success of US operations in SEA as June drew to a close. The situation remained threatening as the NVA buildup of surface-to-air missile (SAM) sites, AAA, airfields, and men and materiel in MR-1 of RVN continued at a rapid pace and the steady resupply and buildup efforts in other areas throughout Southeast Asia continued.

Killer Analyst Viewpoint of War

During the month of April, insurgent forces aimed most of their efforts against provincial capitals throughout the country and major LOC. Of note was the heavy siege of Takeo, which was successfully countered by heavy US air strikes. In May, the emphasis shifted from provincial capitals to the Mekong corridor. During this time, many enemy units also began preparations for maintaining rainy season defensive positions while other units west of the Mekong and Tonle Sap rivers prepared for attacks in the Phnom Penh area. In early June, insurgent forces began attacks to the
west of Phnom Penh, and towards the month's end, enemy initiatives had begun or appeared planned for approaches on all sides of the capital. By the end of June, the Cambodian government was facing the greatest crisis in the history of the three year war.  

**Intelligence Organization and Functions**

(U) The Support Division assumed Plans functions and subsequently the name of the division was changed to Plans and Support Division.  

**Collections Division**

During this period, the Reconnaissance Branch (INCR) continued to support the reconnaissance effort in Cambodia, Laos, and South Vietnam by using 18 RF-4C aircraft missions per day, and by submitting requests to the SAC Reconnaissance Center for photo coverage by Buffalo Hunter drones in high threat areas, principally the Khe Sanh area of South Vietnam. Activities focused primarily on monitoring LOC in Laos, area searches for target development and BDA in Cambodia, and enemy airfield and SAM site upgrading and development in South Vietnam.

Continued high level movement of enemy  

*7AF informal interdiction and intelligence monitoring campaign.*
supplies along LOC in Laos required up to eight reconnaissance missions daily to provide adequate monitoring during the months of April and May. In early June, an all-out reconnaissance effort in reaction to the Cambodian crisis reduced missions in Laos to an average of two to three a day. In Laos, enemy use of LOC was reviewed and reconnaissance resources were concentrated along LOC with the most activity. Daily monitoring was initiated on LOC reflecting concentrated use while those reflecting limited use were monitored only sporadically.

As the military situation in Cambodia worsened, a very vigorous reconnaissance effort was made to identify enemy troop/supply concentrations and movements. Special emphasis was placed on LOC supporting the Phnom Penh and Takeo areas, the Mekong River convoy area, and other critical areas designated by targets personnel and commanders. Area searches in support of target development reached a new high during the period with an average of 16 daily RF-4C sorties committed to Cambodia since early June. A new infrared (IR) system, the AN/AAD-5, was operationally employed during June presenting a new capability to detect enemy presence at night in the form of vehicles,
INCR continued to support the monitoring of cease-fire violations in South Vietnam with emphasis on enemy upgrading and expansion of SAM sites and airfields. Buffalo Hunter drones were used in high threat areas to obtain near daily coverage while precluding unnecessary exposure of aircrews to hostile fire. Working in direct coordination with the Navy, INCR was monitoring the fulfillment of requests by the JCRC for reconnaissance of the known crash sites in South Vietnam.

(U) The introduction of Special Consumer Oriented Language (SPECOL) to INCR computer files during this period provided a greater and more flexible retrieval capability and would permit more economical use of Photo reconnaissance resources and manpower. SPECOL provided the capability to query all available fields of information within virtually any frame of reference. INCR would use this new capability to identify targets falling within a common area, thus eliminating duplicate photography, and in the compilation of statistics for review purposes.

The status of the three U-21 Airborne Radio Direction Finding (ARDF) aircraft temporarily deployed
at Udorn, Thailand, became a major issue during April. On 7 April, Secretary of State Rogers decided that the U-2's should be redeployed from Thailand because of strong political objections. Before any actions were taken to relocate the aircraft and associated personnel, a JCS message of 11 April 1973 stated that higher authority had directed that no action be taken on the State Department message. The aircraft continued to operate on a "semi-permanent" basis.

A redesignation of AAA high threat areas to AAA operating areas by PACAF was made on 10 April. To limit the potential danger of loss of aircraft and crew, all ARDF missions were directed, on 25 April, not to overfly or approach within five nautical miles (NM) of the peripheral boundaries of designated AAA Operating Areas. This restriction caused some degradation of ARDF coverage in Laos.

During May and June, increasing AAA Operating Areas in SEA, coupled with International Control Commission Supervision (ICCS) flight corridor restrictions in South Vietnam, denied access to target areas and resulted in decreased collection, especially in Barrel Roll and the Steel Tiger areas.

* Nickname of operations area in southern Laos.
In mid-to-late May a series of messages was exchanged with Hq Pacific Air Forces (PACAF) and HQ USAF. The thrust of the matter was a requirement to justify the retention of the full USAF ARDF fleet of 22 aircraft into FY 74, with emphasis on quantifying the operational results identifiable from the ARDF intelligence input. In the end, PACAF and USAF accepted the USSAG position that the ARDF program was uniquely important to the intelligence program in SEA and program funding was requested.

During 9 to 10 June, coordination between J3 and J2 was begun to Frag a joint Baron EC-47/Spectre AC-130 mission in Cambodia, with the objective of neutralizing enemy Frequency Modulation (FM) intrusion transmitters. Technical and procedural difficulties delayed initiation of the mission, but it was expected to go on a trial basis in July.

On 30 June, INCC concurred in a reduced Frag rate for EC-47's (50 percent vice 56 percent) in order to maintain full fleet capability throughout FY 74 and stay within the FY 74 supplemental budget request. The impact was a weekly reduction of three to five sorties from that previously available. During 4 to 29 June, ARDF missions were flown in western Barrel
Roll along the "China Road" and were subsequently cancelled by COMUSSAG due to the AAA threat.\(^7\)

On 25 April, the Electronics Intelligence (ELINT) Section hosted a Pacific Command (PACOM) Elint Center (PEC) briefing team. The team briefed COMUSSAG/7AF and key staff on PEC's Elint/Communications Intelligence (COMINT) analysis of Linebacker II. The successful tactics as well as areas of weakness were covered in some detail. General Vogt directed the staff to make a study, from which a briefing was prepared, for formulating future contingency plans.

During April, SACADVON, in coordination with J2 and J3, began fragging B-66C's in conjunction with photo drones and F-4's. The objective was capitalization on Elint activity stimulated by the low altitude photo collectors. Initial indications were lucrative.

The Signals Intelligence (SIGINT) proposal mentioned in the previous history was signed by General Vogt and taken to the Air Force Special Security Office (AFSSO) for dispatch by Special Intelligence (SI) courier to CINCPAC on 25 April 1973. No formal reply had been received as of 30 June.
New collection routes for the EB-66C were planned for coverage in the Gulf of Tonkin off the northern coast of South Vietnam. Coordination was conducted between PEC, DAO Saigon, and 388th Tactical Fighter Wing (TFW). The first of these sorties was flown on 27 May 1973. Approximately three sorties per week were planned in the Gulf of Tonkin.

During the period 14 to 16 June, an Electronic Warfare technical exchange program between USSAG personnel and visitors from other Thailand units was organized by the Elint Section. Representatives from the 388th TFW at Korat and the 8th TFW at Ubon attended. The program included discussions of Electronic Warfare tactics in Southeast Asia, displays of F-105G and EB-66E aircraft, and a radar homing and warning trainer demonstration.

In June, the Elint section formulated and disseminated a contingency collection schedule for Elint platforms. This action was in response to a CINCPAC assigned task and involved coordination with PEC, SAC, PACAF, and Pacific Fleet (PACFLT).

During this period, the Human Intelligence (HUMINT) section levied several intelligence collection requirements (ICR) on DAO, Saigon, the 500th Military Intelligence Group (MIG) and Det 5, 7602
Air Intelligence Group (AIG) in Bangkok. These ICRs involved the following: effects of US air operations in Cambodia (BDA in particular); the effectiveness of various US weapon systems used in Southeast Asia; information on specific T-54B (Soviet) tank parts; information on the radar associated with the SA-3 missile system; passive night vision devices; active infrared sighting devices; mortar system; electromagnetic proximity fuzes; chemical equipment and handbooks; unidentified surface-to-air missile system; and, acquisition of material associated with 37, 57, 85, and 100mm AAA systems.

Requests for information were levied on DAO, Saigon, concerning the following: information on NVA switchboards and landlines in Quang Tri Province, RVN; the location and planned redeployment of an NVA Division in Binh Dinh Province, RVN; biographic data on an NVA general assigned to the Two Party Joint Military Commission; biographic data on a South Vietnamese official in the Government of Vietnam (GVN) Ministry of Defense; bomb damage assessment of the Ba Kev area, Cambodia; and procedures used by Khmer insurgent/NVA forces in Cambodia for obtaining advance notification of ship convoy movements to Phnom Penh.

Information was requested from the SRF Cambodian Order-
of Battle Center on transportation networks and lines of communication in Cambodia. SRF was requested to provide information on POW camp locations in Cambodia and Laos. Det 5, 7602 AIG in Bangkok and Det 5, OL-A, 7602 AIG at Nakhon Phanom were tasked with collecting information on several newly reported radar sites in Laos.

A list of essential elements of information (EEI) involving information on missing or dead (body not recovered) US Prisoners of War in Southeast Asia was forwarded by the JCRC to USSAG. The HUMINT section translated these EEI into an ICR (ICR #U-UPE-U1922). ICR U-UPE-U1923, Khammouan Province, Laos, was published by the HUMINT section. This ICR updated an ICR on enemy threats to Nakhon Phanom Air Base from Thakhet, Laos. ICR U-UPE-U1924, SA-7 SAM Deployment, was published in response to a USSAG, Chief of Staff requirement for information on SA-7 SAM deployments to Thailand. These ICRs were validated by the Defense Intelligence Agency (DIA) and levied for collection action.

In response to a JCS requirement for increased BDA reporting on Cambodia, the HUMINT section informed the DAO, Det 5, OL-B, 7602 AIG and the 500th MIG, Saigon, to increase their emphasis on agent BDA reporting in
Cambodia. In addition, the USSAG intelligence analyst was contacted to obtain timely and specific intelligence requirements on Cambodia. These requirements were forwarded to the DAO, Saigon, and the 500th MIG, Bangkok.

Arrangements were initiated by the HUMINT section to provide intelligence support to planned JCRC recovery operations in South Vietnam. DAO, Saigon, was tasked with obtaining order of battle and Viet Cong (VC)/NVA activity in the vicinity of JCRC proposed casualty resolution/recovery sites. During this period intelligence provided information on 20 crash sites to JCRC.

During this period, CINCPAC designated USSAG as action collector on 30 ICRs previously managed by United States Military Assistance Command, Vietnam (USMACV). DAO was informed of this and the administrative records involving these ICRs were transferred from the DAO to USSAG. Other ICR management actions involved a CINCPAC request for a review of active and hold category controlled collection objectives (CCO) and human resource collection directives (HRCD) managed by USSAG, for recommended changes in collection status. No changes were made.8
PLANS AND SUPPORT DIVISION

(U) The Strike Analysis Branch continued to brief tactical air (including F-111s) and gunship BDA on a daily basis to COMUSSAG/7AF and staff. (See Figure 11)

In May, the Strike Analysis Branch began receiving additional ground intelligence BDA inputs for correlation and analysis. These inputs were received and, if validated with air strikes, were briefed and reported. In late June, the branch also began briefing ARC LIGHT BDA received from ground intelligence reports.

(U) The Plans and Reports Branch assumed J-2 plans functions during this period and the name of the branch was changed from Reports Branch to Plans and Reports Branch to more accurately reflect duties performed.

In May, the branch began reporting BDA on a daily basis to DAO, Saigon. All TACAIR, gunship, and ARC LIGHT BDA, and strikes occurring within 10 miles of the contiguous Khmer/South Vietnamese border area were reported daily via message to DAO, Saigon.

INDR continued to prepare J-2's input concerning ARC LIGHT BDA, photo reconnaissance significant items, sensor activity, ARDF mission
SIGNIFICANT TACAIR BDA

BRIEFED AND REPORTED BY IND FOR THE PERIOD 1 APRIL THROUGH 30 JUNE 1973.

1. BUNKERS: 6214 Destroyed/374 Damaged
2. STRUCTURES: 724 Destroyed/246 Damaged
3. MORTARS: 368 Destroyed/12 Damaged
4. TRUCKS: 706 Destroyed/239 Damaged
5. ENEMY KSA: 13,854
6. ENEMY WSA: 3,383
7. FORTIFIED FIGHTING POSITIONS: 1142 Destroyed/86 Damaged
8. TANKS: 4 Destroyed/3 Damaged
9. POL BARRELS: 216 Destroyed/1 Damaged
10. MACHINE GUNS: 447 Destroyed/19 Damaged
11. SUPPLY STACKS: 225 Destroyed/8 Damaged
12. WEAPONS (ANY): 485 Destroyed/1 Damaged
results, TACAIR (including F-111s) and gunship BDA
and special items of interest for the COMUSSAG/7AF
Daily Status Report of Selected Southeast Asia
Activities. In May, the Assistant Chief of Staff,
Intelligence, directed the Plans and Reports Branch
to prepare monthly ARC LIGHT BDA Summaries. 9

**Summary of ARC LIGHT Strikes - May 1973**

During May, B-52's struck 615 enemy targets
consisting of truck parks, storage areas, troop
concentrations, food and ammunition storage areas,
transshipment points, base areas, supplies, equipment
areas, bunker complexes, arms factories, gun positions,
armored vehicles, bivouac areas, and artillery positions.
The strikes were conducted through Khmer in support of
FANK operations in approximately 23 vicinities and
were not restricted to any one locale. The complete
assessment of the value of ARC LIGHT strikes was not
known due to weather conditions hampering observability
of results by ARC LIGHT crews, nature of the targets,
canopy coverage of numerous targets, and lack of ground
force penetration in areas of ARC LIGHT strikes to
view results. Results that were reported during the
month of May included 313 secondary explosions and
1 secondary fire at 109 targets as observed by ARC
LIGHT crews. In addition, photography revealed one trail interdicted, three routes interdicted, one destroyed building, one damaged building, two destroyed structures, and five damaged structures. All source intelligence revealed 623 killed by air (KBA), over 20 wounded in action (WIA), 1,200 sacks of rice destroyed, 2 75mm cannons destroyed, 1 60mm cannon destroyed, 1 command post destroyed, 1 75mm recoilless rifle destroyed, 1 82mm mortar destroyed, and numerous small arms and ammunition destroyed. The value of ARC LIGHT strikes were important to the successful defense of Takeo during April and May, and towards efforts to control routes 4 and 5. In addition, ARC LIGHT strikes in the Bassac and Mekong River corridors during May were successful in rendering combat-ineffective elements of at least three regiments in those areas. Most of the surviving enemy elements were forced to withdraw from the immediate Mekong River corridor. ARC LIGHT strikes, in forcing the enemy withdrawal, allowed vital logistics convoys on the Mekong River to pass with much less enemy reactions.10

SUMMARY OF ARC LIGHT STRIKES - JUNE 1973

During June, B-52's struck 574 enemy targets consisting of tank parks, base areas, truck parks,
known enemy locations, bivouac/storage/staging/supply and equipment areas, transshipment points, logistics bases, troop concentrations, ammunition storage areas, headquarters elements, bunker complexes, food storage areas, weapons factories, command posts, training centers, and radio facilities. These strikes continued throughout Khmer in support of FANK operations in approximately 17 vicinities and were not restricted to any one locale. Results that were reported during June included 96 secondary explosions and 3 secondary fires at 43 targets as observed by ARC LIGHT crews. BDA photography of ARC LIGHT strikes revealed route 197 interdicted at four locations, route 151 interdicted, and five structures destroyed and eight structures damaged southwest of Prey Veng along the Mekong River. Intelligence ground reports on BDA received during June included approximately 316 KBA, 600 probable KBA, 102 wounded by air (WBA), 100 percent casualties among one Khmer Insurgent (KI) Company; heavy losses among 3 KI Battalions responsible for interdicting route 5; and the destruction of numerous arms. The value of ARC LIGHT strikes continued to be important to the successful defense of Takeo and to denying the enemy control of the Mekong River banks, thus allowing logistics convoys to pass through without heavy losses. ARC
LIGHT strikes denied the enemy munitions and supplies by striking logistics areas that support enemy operations in the Kampong Cham and Kampong Thom areas. In addition ARC LIGHT strikes against troop concentrations, bivouac, and staging areas south of route 4 and east and west of route 5 supported FANK efforts to maintain these routes open for vital logistics flow. 11

**OPERATIONAL INTELLIGENCE DIVISION**

(U) The Operational Intelligence Division continued to maintain and provide COMUSSAG/7AF with timely assessments of the current situation with regard to enemy capabilities and deployments, and estimates of enemy intentions. On 20 April, the division assumed responsibility for analysis and reporting of the North Vietnam-Laos Border Sensor Program readout. This required producing a daily "Sensor Activity Summary" and a weekly "LOC status and Analysis of Sensor Activity through Entry Corridors of Steel Tiger". On 2 May, it began producing the "Khmer Daily Status Report". This report provided the USSAG estimate of the current ground situation and enemy intentions to Airborne Battlefield Command Control Center (ABCCC), Tactical Fighter, and SAC B-52 units supporting Khmer operations.
The North Vietnamese forces continued to maintain occupied SA-2 SAM sites in the vicinity of Quang Tri Province, South Vietnam. While the number of sites fluctuated somewhat, an average of three sites were maintained. The sites were located around Khe Sanh Airfield and were heavily camouflaged. Khe Sanh was the only area outside of North Vietnam where SA-2 missile sites were noted. Approximately 25 to 30 SA-2 SAM sites were maintained in the Haiphong-Hanoi and Bai Thuong-Thanh Hoa areas in North Vietnam. During May, SA-2 SAM coverage of the Vinh area was deleted.

At the beginning of the period, three SA-3 sites were occupied near Hanoi. However, by the end of June, only one SA-3 site was occupied near Hanoi. Heavy concentrations of enemy AAA defenses remained deployed in Quang Tri Province, and in southern Laos. However, most AAA activity occurred in Cambodia. Since April, five aircraft have been lost to suspected AAA fire in Cambodia. These aircraft included two F-4s, two A-7s, and one OV-10. Although there were losses, only three percent of the sorties flown in Cambodia received reactions. Most reactions were from small arms and 23mm firings, with a few 37mm and 57mm firings also reported. In addition, two incidents of firings of SA-7 missiles involving US aircraft were reported in
Cambodia. The North Vietnamese Air Force fighter inventory increased by 23 MIG-21 and 12 MIG-15/17 aircraft. All fighters were based north of the 20th parallel and no hostile engagements were noted.

A new 1900-foot runway was completed at Moung Nga, Laos (VH 193 575) during April, and a new 4300-foot runway was completed at Khe Sanh Airfield, RVN (XD 860 417) during June. Another new runway was nearing completion at Tchepone Airfield (XD 271 477) in Laos with only final grading required to make the runway serviceable. Most damaged runways in North Vietnam were repaired and minor repairs at numerous other airfields in RVN and Laos were finished. The only airfield outside of North Vietnam with NVA air traffic noted was Sam Neua, Laos.

TARGETS DIVISION

The Target Development Branch was enlarged on 1 June by movement of three personnel positions from the ARC LIGHT Branch and three from Tactical Targets. The purpose of this shift was to reduce development effort duplication, make more efficient use of limited photo interpreter manpower and equipment, and optimize the fusion of all sources of intelligence into potential targets. Between 24 and 29 April, the Division visited all 7AF tactical wings
to assure that target folders were adequately prepared to meet contingency plan requirements. As a result of the target folder staff visit, the division was tasked to prepare and maintain a Master Target Folder Reference List. This list was maintained in Alphabetical, Tiger Target Number, Basic Encyclopedia number, and Target Category sorts. There was also a limited capability to sort the list by Universal Transverse Mercator (UTM) and geographic coordinates. The data in this document was currently being examined for validity. The list would provide the units a convenient target folder management tool and reduce their target folder work load.

A parallel new product was the monthly Special Interest Photographic Intelligence (SIPI) file listing for Barrel Roll, Steel Tiger and RVN, which was used by Wing Target Intelligence Branches to determine which SIPIs had to be kept by each wing. This was needed by the units to insure contingency plan coverage.

A three-man team was maintained throughout the period at the US Embassy in Phnom Penh, KR, to assist DAO personnel in targeting F-111s and B-52s in Cambodia and to expedite FANK target validation. The personnel on the team were rotated each 45 days. It was composed of one ARC LIGHT and one Tactical Targets officer and an experienced targets NCO. This program
significantly improved the quality and volume of targets produced.

During April, the Division provided 30 primary and 10 alternate tactical air targets and 13 to 15 ARC LIGHT targets per day. These targets were located throughout Cambodia; with the preponderance in FREEDOM DEAL. The target load increased with the added effort the enemy mounted in Cambodia following their phasedown in the other Indochinese countries. On 17 April, the F-111 beacon bombing system was initiated in Cambodia. This system greatly increased the F-111's capability in this country. By 30 June the Division was providing 30 F-111 targets per day for single-aircraft F-111 strikes. On 13 May, F-111 pathfinding for F-4s and A7s was introduced. At the end of the period, F-111s were pathfinding up to eight targets per day. On 20 May, targets were provided for F-4 Long Range Airborne Navigation (LORAN) pathfinders. A list of 10 targets was maintained. As targets were struck, new targets were added to maintain the list at 10. On 11 May, the Division began providing five alternate targets in northeastern Khmer for the A-6s to use if they did not expend during their nightly LOC mover search.
Cambodia targets changed drastically in character on 21 June with the initiation of an intensive air campaign against enemy troops threatening Phnom Penh and the river and road arteries which support the city. For this campaign, between 21 June and the end of the quarter, 149 ARC LIGHT and 476 F-111 targets were produced, and 51 FANK generated targets were photo-checked and processed. The daily F-4 LORAN pathfinder and A-6 alternate target programs continued.13
FOOTNOTES

CHAPTER II

1. Rpt (S), USSAG/7AF (J-2), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.

2. Ibid.

3. Ibid.

4. Ibid.

5. Msg (S) SECSTATE to AMEMB, Bangkok, 060028Z Apr 73, Subj: Monitoring A/C (S), GDS-Dec 81.

6. Msg (S) JCS to CINCPAC, 112150Z Apr 73, Subj: Monitoring A/C (S), GDS-Dec 81.

7. Rpt (S) USSAG/7AF (J-2), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.

8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.

12. Ibid.

13. Ibid.
CHAPTER III
OPERATIONS

COMMAND AND CONTROL

This reporting period, which followed USSAG/7AF's assumption of control of SEASIA operations was, primarily, a period of adjustment. Various elements of the headquarters attempted to find more efficient ways to utilize resources in support of KR operations without increasing the workload or personnel requirement of the DAO, Phnom Penh. The intent was to develop the Khmer's abilities and potentialities to the maximum extent possible with regard to the conduct of the ground war, and to develop a command and control network to coordinate the planning and use of air power into the overall battle plan. Also, through US and allied sponsorship, training and materiel aid programs were slowly building up a small, but increasingly effective, tactical strike and support capability within the KAF, in preparation for the eventual withdrawal of US Air Forces from active tactical operations. In other areas of operations, USSAG/7AF continued to maintain a posture of preparedness to counter possible attempts on the part of the enemy.
forces to initiate major hostile operations in those areas where cease-fire agreements were in effect.

On 6 April, in response to continuing NVN logistics activities, as well as suspected build up of air defenses along the Ho Chi Minh Trail complex, the 7AF restrictions on overflight of Laos by armed aircraft were eased to allow the escorts for US manned reconnaissance missions to go armed under the provisions of defensive response granted by JCS authorities. Also, in response to continued NVN/Provisional Revolutionary Government (PRG) refusal to comply with the provisions of the Paris January accords, JCS stated that it was timely to reintroduce low profile US air operations in the area, so that the NVN government could begin to get used to peacetime US military presence in the region. The first implementation under this guidance was the reintroduction of limited reconnaissance activities by Drone and "High Flyer" aircraft in the area. On 18 April, with the concurrence of AMEMB, Vientiane, the remaining 7AF restrictions to armed overflight of Laotian airspace were lifted. This permitted armed escort of approved missions in Laos, the ferrying of normally configured combat aircraft in and out of
the theater, and allowed US Thai-based aircraft engaged in approved activities in eastern KR to transit Laotian airspace to and from their target areas.

On 14 April, as a result of a near short round incident with a gunship and FANK forces operating in a prevalidated sector of FREEDOM DEAL, DAO, Phnom Penh, with coordination from FANK, established two restricted areas around the cities of Kampong Thom and Kampong Cham within the FREEDOM DEAL region. Operations in these areas established the first permanent friendly footholds in the FREEDOM DEAL region in nearly two years.

On 17 April, DAO, AMEMBER, Phnom Penh, requested the withdrawal of Embassy involvement and DAO staff participation in the direct conduct of US air operations in the KR. Due to the pressures of limited resources and manpower, it was felt that the control of US air forces in support of FANK operations would be more efficiently and logically managed by direct communications between 7AF and the FANK High Command. However, since the DAO, through an operation known as "Area Control", was providing a vital communications link between USSAG/7AF and the FANK
Combat Operations Center (COC), as well as providing political approvals for air strikes as dictated by then-current JCS directives, an entirely new command and control concept would have to be devised and implemented if support of the FANK was to continue. Fortunately, several projects were already underway, which, with accelerated effort were then welded together to form the first really new concept in command and control since the resumption of major air activities in SEASIA. To eventually replace the liaison functions of the DAO "Area Control", work was started in conjunction with key FANK High Command and COC personnel to equip a Khmer DASC to be collocated with the FANK COC. This project also involved the selection and training of personnel.

On 27 March, a DAO memo on the K-DASC (to be known as "Bakheng Control") indicated, that despite equipment shortages, training was progressing well. The DASC was going into limited daytime radio monitoring and control operations, with a projected 24-hour operational status in early June. At that time, it would be able to provide FANK approvals for strike requests directly to FACs, Gunships or ABCCC, as well as control information and ground situation summaries. Command and control
personnel also began developing contingency procedures and a projected rules and authorities package for the eventuality that at some later date certain elements of the close air support control mechanism might be delegated to 7th Airborne Command Control Squadron (7ACCS)/ABCCC. This proposal was first implemented on a limited basis in the Special Mekong Air Sector (SMAS) program.* When implemented, this procedure resulted in significantly reduced response times for air power, and therefore substantial increases in the effectiveness of US air power in support of Mekong River convoy operations. On 23 March an attempt was made to apply general targets validation procedures during an ABCCC flight. Based on this experience, a realistic assessment of required materials and equipment was made, and operational methodology for airborne target validation was formulated. As a result of these parallel but unrelated activities in the development of K-DASC and 7ACCS resources, and especially in view of the successes achieved by the SMAS operation, it was obvious to COMUSSAG that the

* See USSAG/7AF History 15 Feb-31 Mar 73 p 78.
development of a responsive command and control system, capable of reacting immediately to the unpredictable ground situation in the KR could be accomplished if 7AF target approval authorities were delegated to 7ACCS. On 28 April, the US Secretary of State and JCS approved the withdrawal of AMEMB, Phnom Penh, from day-to-day military operations. This permitted the AMEMB to give blanket approval for operations in the KR for 30-day periods. With this change, the AMEMB's only remaining direct military support functions were the approval of ARC LIGHT target nominations and DAO monitoring of the K-DASC. With the new authorities, COMUSSAG made the decision to delegate the authority for approving immediate air strikes which were clearly within the Rules of Engagement to the senior battle staff member aboard the A3CCC aircraft. The final element of the new concept was the establishment, for the first time, of qualified Forward Air Guide (FAG) FANK ground commanders. This idea had initially been developed to streamline reaction times for operations in Laos. It required granting selected commanders political and military approval authority for air strikes in support of their operations. This arrangement, by agreements concluded
separately between COMUSSAG, DAO and FANK, would give
selected ground commanders full FANK political and
military approval authority for the conduct of air
operations in support of their situations. The
selection would be extremely stringent, and each
nominee had to be specifically approved by DAO and 7AF.
Initially, DAO published a list of 12 FAGs on 28 April,
but until reasonable geographic limits could be
established for each FAG's areas of operations, 7AF
would not implement the operation. On 1 May, the
details were complete and the program was underway.
(Subsequently, on 27 May, DAO supplemented the
original list bringing the total number of FAGs to 25.)
The program was actually initiated on 28 April,
when two USSAG officers went on Temporary Duty (TDY)
to 7ACCS, Korat RTAFB, Thailand where they developed
the necessary materials (maps, guide documents, etc),
to establish an education program to qualify 7ACCS
intelligence personnel in target validation. They
also briefed 7ACCS Directors, Air Battle Staff and
Battle Staff Operations Officers on the application
of ROE on target approvals, and on the extent and
limits of the authorities delegated to them by
COMUSSAG. Over 1400 maps and other associated support
materials were prepared, and preliminary indoctrination briefings were conducted prior to the first mission under the new system. The first ABCCC mission with full target authorities was flown on 1 May, with a 7AF command and control representative aboard to assist and advise in the operation. During the next two weeks, command and control personnel flew 22 sorties (nearly 230 flying hours) instructing and advising 7ACCS personnel, in addition to operating an extensive ground training program for validators and those officers with delegated approval authority. Meanwhile, during the latter portion of April, training had been accelerated at the K-DASC. By the 1 May start date FANK had full capability, and functioned remarkably well with minimum DAO supervision. By 7 May, K-DASC was completely FANK manned and controlled. USSAG/7AF continued to provide personnel and advisory support to 7ACCS throughout May, and by 3 June the program became fully independent and self-sustaining.

In addition to the complete revision in tactical command and control, efforts continued during April and May to upgrade all-weather strike capabilities.
This included the continued installation of Beacons for F-111 Beacon offset bombing, and the continued procurement of X-Band for gunship fire direction. These X-Band units were supplied, on a priority basis, in convoy operations and to commanders in the Phnom Penh Special Military Region (PPSMR) on a priority basis. In an effort to upgrade all weather flexibility, 7AF developed techniques for near-real time diverting of F-111 strikes in support of immediate requests. The initial target plotting for offset data and validation was accomplished at Area Control, but after the assumption of K-DASC Control, the plotting and validation functions were delegated to ABCCC. The plotting equipment was unwieldy for use in airborne situations, and finally a system of airborne validation and ground-based computer generated offset data was tried with good success. As a result, US air power was employed in support of tactical situations rapidly and effectively in nearly any weather and visibility condition.

Early in May it became evident, through press releases from United Press International and Associated Press, that the press corps in Phnom Penh
had developed an intrusion capability into major command and strike control communications channels. The intercepted conversations were being misquoted, thus generating an unrealistic and unfavorable impression of operations. JCS directed the utilization of secure communications capability to the maximum extent possible. After an initial period of adjustment difficulties and equipment problems, the system proved effective in limiting unauthorized access to communications.

For a considerable period of time, it was noted that the enemy possessed the capability to monitor radio communications, and that he used the knowledge gained to plan attacks, withdrawals, etc. In March, reviews of short round incidents and FAC Daily Intelligence Summaries (DISUMs) revealed continuously increasing numbers of positive enemy intrusions into communications channels. These incidents included simple jamming, as well as attempts to provide erroneous information to FACs and gunships. As an example, the investigations of several suspected short rounds revealed that the incidents were most probably declared by an enemy intruder in the hope that the strike would be discontinued. Several incidents
were noted where an individual, identifying himself as the ground commander, attempted to get the FAC to displace ordnance into friendly positions. In at least one case, the intruder was known to have been successful. In response to these problems, USSAG and DAO, Phnom Penh issued revised guidance to both FANK and the operational units under 7AF control, identifying the problems and suggesting corrective and precautionary measures.

With the resumption of negotiations in Paris, JCS provided guidance on 20 May restricting all tactically-oriented US air operations over RVN (except B-52's inbound and outbound from Guam), and prohibited all US strike and reconnaissance support operations in the KR within five NM of the RVN border. On 26 May, during a pause in the negotiations, the restriction of overflight of RVN was removed. On 2 June, in anticipation of renewed negotiations, a two NM KR border restricted area was established within which strikes were prohibited, except under the most compelling circumstances.

Starting in late April, and continuing through 30 June, USSAG/7AF Command and Control engaged in the first thorough, comprehensive update and rewrite of
Operations Order (OPORD) 71-17, Rules of Engagement, since its original publication in December 1971. This was to include significant re-ordering of material to aid in comprehension, the deletion of those rules no longer applicable to RVN and NVN, and revised general rules and definitions in section I. Also, guidance received from JCS and the respective US Embassies would be used to fully update those actions on the KR and Laos, to include new authorities on air engagement provided by JCS.

Significant developments in Tripartite affairs over the past two months included the establishment of formal plans and agreements between KR and RVN. This provided a comprehensive system of communications between various military agencies/units in each country, which would significantly improve coordination between the two armed forces on matters of mutual interest. Nearly all the arrangements necessary to establish formal military liaison relations at the diplomatic level were complete, thus creating another avenue for communications in matters of mutual concern. Representatives of the armed forces of both the KR and the RVN expressed interest in extending an invitation to the Thai government to participate
in future proceedings.¹

**AIR DEFENSE**

On 11 May, a conference was held at USSAG to discuss the results of Radio Relay tests conducted during April 1973. After reviewing the results of the tests, it was decided that additional testing would be required utilizing a directional ultra-high frequency (UHF) antenna at Nakhon Phanom (NKP). Procedures were established to test a Gulf of Tonkin (GOT) orbit south of the primary orbit. Testing of the new orbit was accomplished on 10 June. During the test, the directional antenna at NKP was reoriented toward the new orbit. The results of the tests were extremely favorable in that reliable communications were relayed through the Combat Lightning* aircraft, between NKP and Navy surface units in the GOT as far south as 15-41N and as far north as 19-31N. As a result of tests, the following Combat Lightning orbit areas were established as permanent orbits and incorporated in 8AF Operations Supplement 2 to SAC Operations Order 18-73:

* Nickname applied to the project designed to provide the 7AF Commander with a service automated command and control system for "real time" control of tactical air operations.
- Primary GOT orbit: This orbit would be utilized for contingency operations over NVN north of 20 degrees south latitude.

- Secondary GOT orbit: This orbit would be utilized for contingency operations south of 20 degrees north latitude.

- Alternate (Fallback) orbit: This orbit would be utilized when Barrier Combat Air Patrol was unavailable.

- Hickory refueling anchor: This orbit is utilized to provide UHF communications between Blue Chip and Cricket during Khmer Operations.

A meeting was held on 28 and 29 May at Saigon between USSAG/7AF representatives and the VNAF. The meeting was held at the request of the VNAF and concerned the number of unknown tracks approaching RVN airspace, and VNAF air defense scrambles of their limited resources on US aircraft. The following actions were taken to assist in resolving aircraft identification and associated problems with US air operations over RVN and in the proximity of its borders:

---

Fighter cover by Navy ships in GOT and for Elint, ABCCC, etc., aircraft.

7AF Command and Control Center.

Operations of O-1E (GOMBEY) and AC-47 (SPOOKY) FAC aircraft.
- All US aircraft not on International Civil Aviation Organization flight plans and operating in the proximity of the RVN borders or penetrating those borders would squawk a designated Mode 3 Identification Friend or Foe code. The use of those codes was pending CINCPAC approval.

- VNAF would query 7AF TACC (Blue Chip) when an unknown track was observed. Blue Chip would confirm whether or not the track was US. If not US, the VNAF would advise if a scramble was launched, and the results. Mutual exchange of scramble information was reaffirmed.

- USSAG/7AF would assign monthly codes upon CINCPAC approval.

- To the maximum possible, existing communications for coordination would be used between the USAF/VNAF. If determined necessary at a later date, a dedicated line to Panama would be considered. Line checks would be made for all cross-border circuits at 0100Z and 0800Z daily.

- Search and Rescue/Medical Evacuation coordination would be accomplished between Blue Chip/VNAF, Air Operations Center/DAO on a case by case basis.

(U) The Air Traffic Control Branch was reorganized and combined with the Air Defense Branch. The new branch, designated the Air Traffic Control/Air Defense Branch, was functionally implemented on 6 June. Formal change to the JTD was held in abeyance pending CINCPAC

* Code name for the Da Nang Combat Reporting Center.
approval of a new JTD proposal that was previously submitted.

During the period 15 April to 15 May, Blue Chip continued heavy air operations in Cambodia with special emphasis on all river and road convoys resupplying Phnom Penh and Cambodian bases. Effectiveness of convoy support was increasing with each operation despite an increase in inclement weather conditions.

On 16 April, Blue Chip received orders to begin limited bombing in the Plain of Jars, Laos, for a 72-hour period or until all lucrative targets were exhausted. The entire operation was set up, briefed and begun within seven hours of notification. The operation ended approximately 48 hours after it began when all lucrative targets were struck by the B-52 and F-111 aircraft.

On 20 April, Blue Chip received instructions for heavy air support in the Takeo, Darnpot, and Phnom Penh areas because of large concentrations of enemy forces in those areas. All available forces were diverted to prevent the fall of those cities and the operation was continuing to date with noticeable success. 2
CONTINGENCY PLANS

This report covered a period of uneasy truce and numerous cease-fire violations in RVN, along with increased combat operations in the KR. During this period the contingency plans branch was involved in the formation of several new plans. A major task during this reporting period was the development and staffing of a plan for the re-introduction of US air forces into the Republic of Vietnam. The plan, USSAG/7AF Operations Plan (OPLAN) J0001, "Talon Eagle", was in final coordination as of 30 June.

Another major task was the development of a USSAG/7AF Contingency Plan (CONPLAN) in support of proposed CINCPAC OPLAN 5100. USSAG/7AF CONPLAN 5100 provided for the employment of US ground, air or Naval forces for Personnel Recovery (PR) operations in Southeast Asia and for the encouragement and support of friendly indigenous military and para-military forces in PR operations in their respective countries. This CONPLAN was in final planning stage awaiting receipt of an approved version of CINCPAC OPLAN 5100. This office developed and published an OPLAN to provide a continuous air campaign, as required, in Laos in an effort to reestablish the cease-fire arrangement.
should a breakdown occur and hostilities resume throughout Laos. Air operations in the Khmer Republic would be continued, if required. Also developed was an OPLAN that provided for continued USSAG/7AF Command and Control capabilities in the event USSAG/7AF facilities were threatened, damaged or destroyed. The command and control functions would be moved to or assumed by alternate Headquarters locations. The OPLAN was in the initial planning stage as of 30 June.³

**WEAPONS AND TACTICS**

The efforts of the Weapons and Tactics Branch during this period were influenced primarily by USSAG/7AF combat operations conducted in support of the KR. The primary emphasis was on developing tactics for the combat conditions peculiar to the KR. New tactics were developed for nearly every tactical aircraft operating in that theater. In addition, the branch developed plans for aircrew training operations in Thailand and participated as the USSAG/7AF Office of Primary Responsibility for combat evaluations conducted for new systems. In the area of tactical reconnaissance, the AAD-5 Infrared Reconnaissance Sensor was combat evaluated. The PACAF theater introduction and evaluation of the AAD-5 began on
5 June. The flying phase began on 11 June and continued through 28 June, with 34 AAD-5 night sorties fragged during this period at a rate of two sorties per night. The AAD-5 was found to provide an effective night capability not previously enjoyed by tactical reconnaissance.

The Pave Spike* continued to have production development problems; however, one major problem, an incompatibility between the scan converter display system (SCDS) and the Spike system was resolved. The incompatibility, in which the video picture would lose synchronization and tear or present a flashing display, had not been detected since the fix was installed in mid-May. As a result of Pave-Spike production problems, low reliability and mean time between failures (MTBF) (none of the problems were trend setting) the 8th Tactical Fighter Wing declared the Pave Knife, a highly reliable proven designator system, a critical resource. The Knife had been withheld from current combat operations in support of more demanding contingencies. Delivery to Ubon of Pave Spike preproduction pods 11 thru 19 was to be in July 1973. PACAF requested USSAG consider the continued retention of the four Pave

* A pod mounted day-tracking laser designator/ranging system integrated with the avionics of the F-4 aircraft.
Knife systems. PACAF's request was based on the delivery of the nine additional Spike pods, on Laser Guided Bomb (LGB) reports that indicated to them the Spike had replaced the Knife as the prime designator system, and contract support costs for the Pave Knife system. To offset the Pave Spike low reliability, USSAG recommended that all nine additional Spike pods with support Aerospace Ground Equipment (AGE) be in place and operational prior to returning the Pave Knife systems.

USSAG received its first shipment of 925 Big Wing LGB kits (351B/B) on 15 June. Test results indicated that the new kits (52 inch wings vs 39 inches on the earlier kits) decreased the Circular Error Average (CEA).

USSAG established a 1,000 kit minimum stock level but would frag some of those kits during combat operations to confirm the improved CEA capability and to establish a data base. The big wing kits (351B/B) would be used only on the MK-84. Use of the 351B/B with the MK-82's would reduce the number of MK-82's that were presently being carried. Weather, terrain, foliage
and availability of suitable targets continued to be the limiting factors (in the Khmer, availability of suitable targets was the major limiting factor) in the employment of the AGM-65 weapon system. 4

**Electronic Countermeasure (ECM) Training**

As of 30 June, only the MSQ sites had lock-on capability that was required to obtain proper Wild Weasel training in Thailand. Training was being conducted with the NKp MSQ site; however, due to the inadvertent release of an ATM-78 (no motor or war head), the 388TFW put the MSQ/Wild Weasel training on an indefinite hold.

Electronic Warfare (EW) training continued to be elusive for SEA units. An interim proposal was staffed and forwarded to 13AF for joint EW training in the Gulf of Tonkin with CTF 77. This training would apply to EB-66E and F-105G Wild Weasel aircraft and crews. Approval for the proposed joint training in the GOT was received from PACAF and CINCPACFLT. Final details were to be completed and training begun with the conclusion of End Sweep (mine clearing in NVN). A formal proposal for Thailand EW training was presented to a joint conference at MACTHAI in early June. The briefing was presented by 13AF with representatives from 7AF and 13AF ADVON present. A draft of a completed EW training program was prepared jointly by 7AF, 13AF, 13AF ADVON and MACTHAI J-3. The proposal was submitted for approval and action by PACAF and
MACTHAI. Under consideration was the introduction of a multiple radar simulator (Nellis package) to be located in a suitable training area with adequate airspace for realistic signal display and counter measures. The proposal also identified ECM frequencies necessary for training. MACTHAI was negotiating agreements to provide the necessary clearance and training areas as of 30 June.

During the period April through June, radar transponder beacons in the Khmer increased to 10 F-111 J-Band and 8 B-52 X-Band units. In May, SAC made its first beacon release, and by the end of June had made live drops on three of the eight beacons. By 30 June, TAC F-111's had made over 1,800 successful beacon releases using each of the 10 beacons.

Seventy-five ALQ-119 ECM pods were delivered to SEA, 50 of which went to the 8TFW at Ubon and 25 to 388TFW at Korat. Problems were experienced with the ALQ-119 radomes. Soft spots and deterioration of the radome material were occurring with increasing frequency. A modified radome unit developed to correct the problem experienced similar deterioration. The immediate corrective action by Air Force Logistics Command (AFLC) increased the spare
stock level of radomes pending further study. During April and May, representatives from USSAG Plans Branch attended the World Wide Radar Homing and Warning (RHAW) Conference at Robins AFB and the World Wide ECM Pod Conference at Eglin AFB. Experiences of SEA operations were discussed at both conferences with representatives of other commands and Hq USAF, which resulted in a better understanding of problem areas and effectiveness of EW systems.

Improvements in ECM Systems for the F-105G Wild Weasel and F-111A aircraft were still undergoing study and evaluation. Approval has been received for an AFR 57-4 Class 1b mod ("three wire fix") for the F-111A RHAW systems.
with full or partial ALR-46 modification. A study was underway at Pacific Command Elint Center and USSAG/7AF to identify the sources of erroneous RHAW activation for possible revision of the system recognition logic.\(^5\)

**Gunship Operations**

During this period, a moveable gun mount was added to the AC-130H aircraft, and its effectiveness was closely monitored. Results were favorable showing an increased rate of fire due to the trainable system and no adverse reactions such as increased gun malfunctions. Concept of operation and tactics were developed for the deployment and use of the TEMIG beacons used by friendly troops to direct gunship fire. Procurement of these beacons was requested by this branch and their deployment to Khmer occurred during this period. The effectiveness as countermeasures against the SA-7 of the AN/ALE-20 flare ejector sets, the AN/ALE-17 flares, and the recently installed engine infrared shields was continually being monitored.\(^6\)

**Tactical Analysis**

A report, entitled "An Analysis of Laser Guided Bombs in SEA", was prepared for Air Force wide
distribution. It covered the period from 1 February 1972 to 28 February 1973, and summarized the operational results of over 10,500 LGBs used by USAF in combat during that time. Three measures of LGB operational effectiveness were used:

- The number of destroyed or damaged (D/D) targets per sortie.
- The number D/D per bomb.
- The percentage of targets attacked which were D/D.

Different airborne laser illuminating systems were examined and their accuracy was shown to vary only slightly from each other. The accuracy figures also agreed very closely to those predicted in the Joint Munitions Effectiveness Manual. With a direct hit rate of approximately 50 percent, the LGB consistently demonstrated the capability to destroy hard pin-point targets throughout SEA. Another report published during this quarter was entitled "The US Air War Against Tanks." It documented the effort of US TACAIR and gunships attacking tanks in SEA from the beginning of the NVN Spring Offensive through February 1973. There were 2414 combat sorties against 1732 enemy tanks with 678 reported damaged or destroyed. Sortie effort and operational results by month, area, and air-to-ground
weapon systems were compared. A detailed comparison of the LGB (laser-guided MK84), the MK82, and gunship weapons was presented, with the LGB shown to be the most effective against tanks. The report also included a short section on cost factors and cost effectiveness. A third report published was "An Analysis of USAF Combat Damage and Losses in SEA, Apr 72 – Mar 73". This study provided data on USAF aircraft vulnerability to battle damage; hit-loss rates and loss rates for each aircraft by geographic area, mission function, and month; and statistical data on the defenses which caused damage and loss to US aircraft.

In response to a request from USSAG Communications-Electronics staff and the 1987th Communications Squadron, the Tactical Analysis Division completed an analysis of the USSAG/NKP secure voice network. The purpose was to provide better service by equalizing the workload between two operator consoles and reducing the requirements for cross-patching between them. This study revealed two possible improvements over the existing system:

- Reduce cross patches by 16 percent and provide a 44.3/55.7 percent load distribution.

- Reduce cross patches by 18 percent with a load distribution of 41.7/58.3 percent.
The findings were submitted to the requesters for cost evaluation.

USAF aircraft damaged or lost in combat during the period 1 April through 30 June, are listed below. This data was extracted from Southeast Asia Data Base (SEADAB) 429 computer lists.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TYPE</th>
<th>ACFT</th>
<th>CALLSIGN</th>
<th>RESULT*</th>
<th>AREA</th>
<th>CAUSE</th>
<th>AIRCREW STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 APR</td>
<td>AC-130E</td>
<td>-</td>
<td>-</td>
<td>CA</td>
<td>THAI</td>
<td>GND FIRE</td>
<td>OK</td>
</tr>
<tr>
<td>7 APR</td>
<td>OV-10</td>
<td>RUSTIC 10</td>
<td>-</td>
<td>CL</td>
<td>KHMER</td>
<td>GND FIRE</td>
<td>1 KIA</td>
</tr>
<tr>
<td>18 APR</td>
<td>F-4</td>
<td>LAREDO 22</td>
<td>-</td>
<td>CL</td>
<td>KHMER **</td>
<td>2 KIA</td>
<td></td>
</tr>
<tr>
<td>24 APR</td>
<td>EC-47</td>
<td>-</td>
<td>CA</td>
<td>ST TIGER</td>
<td>AAA</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>4 MAY</td>
<td>A-7</td>
<td>-</td>
<td>PHIL 02</td>
<td>CL</td>
<td>KHMER</td>
<td>SM ARMS</td>
<td>1 INJURED</td>
</tr>
<tr>
<td>25 MAY</td>
<td>A-7</td>
<td>-</td>
<td>RUMMY 2</td>
<td>CL</td>
<td>KHMER</td>
<td>SUS AAA</td>
<td>1 KIA</td>
</tr>
<tr>
<td>25 MAY</td>
<td>OV-10</td>
<td>(MAN N001)</td>
<td>CA</td>
<td>KHMER</td>
<td>GND FIRE</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>26 MAY</td>
<td>F-4</td>
<td>-</td>
<td>WOLF 0-6</td>
<td>CL</td>
<td>KHMER **</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>5 JUN</td>
<td>OV-10</td>
<td>NAIL 42</td>
<td>CL</td>
<td>KHMER</td>
<td>UNK</td>
<td>1 KIA</td>
<td></td>
</tr>
<tr>
<td>14 JUN</td>
<td>CH-53</td>
<td>KNIFE 23</td>
<td>CA</td>
<td>KHMER</td>
<td>SM ARMS</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>16 JUN</td>
<td>F-4</td>
<td>WOLF 07</td>
<td>CL</td>
<td>KHMER **</td>
<td>2 KIA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* CL-COMBAT LOSS
CA-MINOR DAMAGE
CB-MAJOR DAMAGE
** FAST FAC CRASH DURING MARKING PASS
The USSAG Data Management and Analysis Branch made numerous retrievals of sortie, ordnance and target data from SEADAB in support of analytical studies compiled by the Operations Analysis Branch. This support extended to the reduction of data in the required formats and graphic representations for inclusion in the published reports. Similar tasks were completed in support of Operations Briefing Branch Projects, including the USSAG Command Briefings to visiting officials and the weekly presentation for the Chief of Staff meeting. In addition, on numerous occasions data was provided in response to requests from the Director of Operations, the Deputy Director, and several divisions.

The sortie levels in the KR are shown in Figures 12 and 13. Figure 12 depicts the increase in sortie rates for ARC LIGHT and US TACAIR. Also shown are VNAF sorties. VNAF air activity in KR terminated with the Vietnam cease-fire of 28 January 1973. Figure 13 shows the distribution of US TACAIR before, during and after the transitional period associated with the Vietnam and Laos cease-fire dates. The current KR effort was compared with former level in all areas of operations.
CHART I

COMBAT SORTIES IN THE KHMER REPUBLIC
BY OREP WEEK, FROM MID-AUGUST 1972

ARC LIGHT SORTIES

SORTIES FLOWN

VNAF TACAIR

US TACAIR

US AND VNAF TACAIR SORTIES

21 WEEK ENDING

22 Aug 72
29 Aug 72
5 Sep 72
12 Sep 72
19 Sep 72
26 Sep 72
3 Oct 72
10 Oct 72
17 Oct 72
24 Oct 72
31 Oct 72
7 Nov 72
14 Nov 72
21 Nov 72
28 Nov 72
5 Dec 72
12 Dec 72
19 Dec 72
26 Dec 72
2 Jan 73
9 Jan 73
16 Jan 73
23 Jan 73
20 Feb 73
27 Feb 73
6 Mar 73
13 Mar 73
20 Mar 73
27 Mar 73
3 Apr 73
10 Apr 73
17 Apr 73
24 Apr 73
1 May 73
8 May 73
15 May 73
22 May 73
29 May 73
5 Jun 73
12 Jun 73
CHART II
US TACAIR SORTIES FLOWN
SEASIA BY COUNTRY—
BY OREP WEEK

SORTIES FLOWN

4000

3000

2000

1000

WEEK ENDING

NOV 1972

DEC 1972

JAN 1973

FEB

MAR

APR

MAY

JUN

1

19

23

33

20

17

8

21

12

26

NYN

RWN

LAOS

KHMER

FIGURE 13
COMPUTER OPERATIONS

(U) The following tabulation reflects the percentage of total computer processing time dedicated to each major functional area for the months indicated.

<table>
<thead>
<tr>
<th>Area</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA Data Base (SEADAB)</td>
<td>.51%</td>
<td>50%</td>
<td>67%</td>
</tr>
<tr>
<td>SEA Recon Imagery File (SIRFA)</td>
<td>11%</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>Joint Casualty Resolution Center</td>
<td>6%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Fragmentary Order Preparation</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

(U) Systems programming personnel were allotted a total of 111 hours of dedicated computer time during the period for system software maintenance and preparation, and testing of Release 2.6 of the Operating System (OS). Effective 1 July, International Business Machines (IBM) would no longer provide support for Release 20.1, the current OS. The upgraded Rélease was expected to be operational by 11 July.

(U) During this period, a major effort was undertaken to recover and document source programs of the Frag Prep system. Previously, there were numerous programs existing in executable object code only, with no corresponding source code. This condition caused program changes to be very difficult and time consuming to make. The initial problem was caused due to
carelessness in the maintenance and storage of the source programs. Since they have been recovered and documented, new procedures were implemented to assure that the source code was updated anytime a program was compiled. Moreover, a separate set of program listings was maintained for the programs under test, in addition to those for operational programs.

(U) The Personnel Information System for USSAG/J-1 was completed and operational. It consisted of five Common Business Oriented Language (COBOL) programs which provided the capability to maintain an up-to-date personnel information file. In response to a request from USSAG's Command and Control Branch, a program was developed to compute P-111 bombing offsets for predetermined beacon locations. The basic program, beacon, and two new computation subroutines were created. One converted subroutine Universal Transverse Mercator (UTM) coordinates to latitude and longitude with accuracy to hundredths of a second. The other subroutine computed range and bearing from one point to another. Both were based on routines provided by SENTINEL LOCK. Beacon accepted the information necessary to accomplish a point beacon offset calculation from the computer.
operator via the console, and outputs the results to
the printer and console typewriter.

(U) A program for USSAG Intelligence was
developed to produce selective listings of its Target
File Index. The program user could select up to eight
different sorts and selective retrievals during one run.
Much tedious administrative work was eliminated from
the duties of intelligence personnel through the use
of this program.

(U) The SEADAB Retrieval Executive was modified
to incorporate several other selection criteria which
were adapted from other locally used programs. A copy
of the program and documentation of the changes was
forwarded to PACAF for evaluation and possible inclusion
into its SEADAB system. A program maintenance manual
on the Bright Light Casualty Resolution System was
written to aid the programming effort required to
support the dynamically changing needs of the JCRC.
It was sent to CINCPAC/J02C, the agency originally
tasked to provide the documentation, to support its
parallel operation of the system.

(U) As a result of visits and queries from PACAF
and other agencies, and due to intensive research
into the operations report (OPREP) 5 report, several
significant corrections and enhancements were made regarding reporting procedures and the OPREP-5* summary processing. Inconsistencies were identified in the reporting of KC-130F and OV-10 sorties in particular. Reporting procedures and programs creating the OPREP-5 were modified to correctly classify and summarize the sorties. In addition, other significant changes were made to the OPREP-5 programs to more accurately report air aborts and administrative liaison sorties. The data review and correction project for 1972 SEADAB records was nearing completion at the end of the quarter. Data from Jan-Jun 72 was corrected, and updated SEADAB history tapes were mailed to users in May. Corrected tapes for the period Jul-Dec 72 would be mailed in July. Although initially requested to correct data only from Apr-Sep 72, it was undertaken for the entire year. Research into the unique problems and requirements for correcting data from earlier periods was begun and would be reported at a later time.

(U) Senior USSAG Computer Operations Branch personnel visited DAO, Saigon in June to coordinate with DAO, JGS Liaison, and VNAF reports personnel.

* Weekly summary of mission accomplishments.
Procedures were established to facilitate direct telephone contact between DOYR and VNAF reports personnel. SEADAB retrievals for the periods indicated are listed below:

<table>
<thead>
<tr>
<th></th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Runs</td>
<td>450</td>
<td>465</td>
<td>450</td>
<td>1365</td>
</tr>
<tr>
<td>Weeklies</td>
<td>72</td>
<td>83</td>
<td>85</td>
<td>240</td>
</tr>
<tr>
<td>Monthlies</td>
<td>15</td>
<td>18</td>
<td>22</td>
<td>55</td>
</tr>
<tr>
<td>Specials</td>
<td>477</td>
<td>424</td>
<td>313</td>
<td>1214</td>
</tr>
<tr>
<td>Total</td>
<td>1014</td>
<td>990</td>
<td>870</td>
<td>2874</td>
</tr>
</tbody>
</table>

**AIR OPERATIONS**

Air operations during the period 1-30 April were concentrated almost exclusively in Cambodia, except for reconnaissance and ECM flights into Steel Tiger, the Barrel Roll, and South Vietnam. Of these, only EC-47 flights were directed into South Vietnam. An alert posture was maintained for contingency strike and Air Defense purposes. (See Figure 14) Thirty-seven slow FAC (OV-10s) and 24 fast FAC (F-4s) directed approximately 116 sorties daily in air strikes against logistic channels in FREEDOM DEAL, and against enemy actions in contact with friendly ground commanders. Several Mekong River and Route 4 Cambodian convoys received continuous air cover from slow FACs and dedicated A-7 aircraft. F-111s were directed against
preplanned targets, and some beacon divert targets. The F-111s flew around the clock offering a day-night response for friendly ground commanders, especially in the Takeo area. AC-130 gunships flew in northeast FREEDOM DEAL interdicting enemy supply channels, but primarily striking against troops in contact (TIC) and attacks by fire (ABF) in the Phnom Penh area. Approximately six to eight LORAN equipped F-4s were fragged daily to lead B-52 strikes in Cambodia. (See Figure 15)

The period 1 May – 31 May was very much a continuation of the frag profile for April. On 11 May, Marine A-6s from Nam Phong were first fragged into FREEDOM DEAL at night against categorized routes to strike moving targets. A secondary stationary target was provided as a backup. Pathfinding training missions began to build an IFR capability during the rainy season. On 13 May, F-111s were first scheduled to pathfind A-7s. On 17 May, F-111s were first scheduled to pathfind F-4s from Ubon. On 24 May, Ubon F-4s were scheduled to pathfind Udorn F-4s. Route 4 and Mekong River convoy escort and air cover was fragged for 15 days in May. This convoy escort incorporated approximately 32 A-7s and 8 OV-10s fragged each day. (See Figure 16)
## ALERT POSTURE

<table>
<thead>
<tr>
<th>BASE A/C</th>
<th>TOTAL 15min</th>
<th>SAR 5/60</th>
<th>AD 24HR 30min</th>
<th>24HR 1hr</th>
<th>DAY 15min</th>
<th>DAY 30min</th>
<th>NIGHT 30min</th>
<th>1hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBN F-4</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11*</td>
</tr>
<tr>
<td>UBN AC-130</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>UDN F-4</td>
<td>10</td>
<td></td>
<td>2/2</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT F-4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT A-7</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>308th</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT A-7</td>
<td>8</td>
<td></td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>354th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKL F-111</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NKP OV-10</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2**</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>UBN OV-10</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

*3 PAX-1 Strike Lead
**PAVENAIL

Figure 14
### 1 APR - 30 APR 1973

(Frag Day 25 Apr 73)

<table>
<thead>
<tr>
<th>BASE A/C</th>
<th>POSS</th>
<th>RATE</th>
<th>TOTAL</th>
<th>ALERT</th>
<th>STRK</th>
<th>T.TIH</th>
<th>OTHER</th>
<th>ST</th>
<th>BR</th>
<th>KR</th>
<th>SV:</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBN F-4</td>
<td>105</td>
<td>.76</td>
<td>80</td>
<td>11</td>
<td>52</td>
<td></td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>UBN F-4</td>
<td>101</td>
<td>.56</td>
<td>56</td>
<td>10</td>
<td>30</td>
<td>(1)</td>
<td>(3)</td>
<td>2(3)</td>
<td>(4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT</td>
<td>24</td>
<td>.50</td>
<td>12</td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(5)</td>
</tr>
<tr>
<td>A-7 365th</td>
<td>27</td>
<td>.74</td>
<td>20</td>
<td>6</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>A-7 354th</td>
<td>40</td>
<td>.76</td>
<td>30</td>
<td>8</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>TKL F-111</td>
<td>44</td>
<td>.75</td>
<td>33</td>
<td>3</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBN AC-130</td>
<td>16</td>
<td>.75</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>SUB TOT</td>
<td></td>
<td></td>
<td>170</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T F-4</td>
<td>25</td>
<td>.48</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>41</td>
<td>182</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT F-105</td>
<td>23</td>
<td>.26</td>
<td>6</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT EB-66</td>
<td>7(c)</td>
<td>.28</td>
<td>2(c)</td>
<td></td>
<td></td>
<td>(2)</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NKP EC-47</td>
<td>17</td>
<td>.59</td>
<td>10</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U-21</td>
<td>4</td>
<td>.75</td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDX RF-4</td>
<td>21</td>
<td>.66</td>
<td>18</td>
<td></td>
<td>7</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NKP OV-10</td>
<td>33</td>
<td>.12</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBN OV-10</td>
<td>30</td>
<td>1.25</td>
<td>37</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>NKP CH-53</td>
<td>11</td>
<td>.18</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Pave Phantom
2. Includes 8 Wold A/C; 10 Gunship escort
3. Recce Escort
4. 6 Laredo A/C
5. 6 Tiger A/C
6. Convoy Escort Included-4 OV-10's River Convoy
   1: A-7's (365th)-River Convoy; 2 A-7's (354th) River Convoy
   11 OV-10's Truck Convoy; 20 A-7's (354th) Truck Convoy

Figure 15
# Figure 16

## 1 May - 31 May 1973

(Frag Day 11 May, 73)

<table>
<thead>
<tr>
<th>BASE A/C</th>
<th>POSS</th>
<th>RATE</th>
<th>TOTAL</th>
<th>ALERT</th>
<th>STRK</th>
<th>T T. TIM</th>
<th>OTHER</th>
<th>ST</th>
<th>BR</th>
<th>KR</th>
<th>SVN</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBN F-14</td>
<td>111</td>
<td>.60</td>
<td>67</td>
<td>11</td>
<td>46</td>
<td>(J2 Path)</td>
<td>10</td>
<td>7</td>
<td>2</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>UDN F-14</td>
<td>89</td>
<td>.57</td>
<td>51</td>
<td>10</td>
<td>32</td>
<td>(Recee Etc)</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT F-4</td>
<td>24</td>
<td>.58</td>
<td>14</td>
<td>2</td>
<td>12</td>
<td>8 Tiger)</td>
<td>12</td>
<td>2</td>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>KRT A-7</td>
<td>26</td>
<td>.69</td>
<td>18</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT A-7</td>
<td>40</td>
<td>.75</td>
<td>30</td>
<td>8</td>
<td>22</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKL F-111</td>
<td>45</td>
<td>.73</td>
<td>33</td>
<td>3</td>
<td>30</td>
<td>30</td>
<td></td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBN AC-130</td>
<td>16</td>
<td>.81</td>
<td>13</td>
<td>1</td>
<td>12</td>
<td>(Night)</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUB TOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| UBP F-14 | 25/12|     | 12/5  | 12/5  | 12/5  |         |         |    |    |    |     |
| TOTAL    |      | 41   | 183   |       |       | 183      |         |    |    |    |     |
| KRT F-105|      |      |       |       |       | (2)      | 2       | (1)|    |    |     |
| KRT E3-66| 2C   | .33  | 60    |       |       | (2)      | 2       | (1)|    |    |     |
| NKP EC-17| 18   | .62  | 11    |       |       | 3        | 3       | 5  |    |    |     |
| U-21     | 4    | .75  | 15    |       |       | 3        | 3       |    |    |    |     |
| UDN RF-4 | 20   | .90  | 18    |       |       | 7        | 2       | 9  |    |    |     |
| NKP OV-10| 9/23 | .13  | 4     |       |       | 4        | 4       |    |    |    |     |
| UBN OV-10| 3/29 | .16  | 37    | 2     |       |          |         |    |    |    |     |
| KKP CH-53| 11   | .18  | 2     |       |       | Thai)     | 2       |    |    |    |     |

**Figure 16**
Air operations during the period 1 June -
30 June were marked by a very heavy Pave Phantom schedule,
a reduction of the alert force, and the cessation of
the fast FAC - FREEDOM DEAL operation. The Pave
Phantoms averaged approximately 14 per day with a high
of 24 and a low of 6. On 15 June, scheduling was
initiated to deconflict B-52 - A-6 - F-111 target times
and locations. On 17 June, the fast FAC - FREEDOM DEAL
operation was discontinued by reallocation of those
sorties to strike flights controlled by slow FACs.
On 22 June, an ASW schedule was initiated and
disseminated to all operational units. On 29 June,
the alert posture was reduced. (See Figure 17) The
17 June allocation reflected the first day of no fast
FAC operation, as well as convoy escort coverage for
Route 5 and Route 4. (See Figure 18)

SENSOR SURVEILLANCE

Since August 1972, the Automatic Data Relay
(ADR) function for the Steel Tiger sensor monitoring
was performed by the ABCCC aircraft, Hillsboro and
Moonbeam. In April 1973, USSAG/7AF decided to
increase ABCCC operations in the KR, which required
the curtailment of the ABCCC orbit in Steel Tiger.
In order to continue monitoring the Steel Tiger sensors,
<table>
<thead>
<tr>
<th>BASE A/C</th>
<th>TOTAL</th>
<th>15MIN</th>
<th>5/60</th>
<th>30MIN</th>
<th>1HR</th>
<th>24HR</th>
<th>24HR</th>
<th>DAY 5MIN</th>
<th>DAY 15MIN</th>
<th>DAY 30MIN</th>
<th>DAY 1HR</th>
<th>NIGHT 5MIN</th>
<th>NIGHT 15MIN</th>
<th>NIGHT 30MIN</th>
<th>NIGHT 1HR</th>
<th>NIGHT 5MIN</th>
<th>NIGHT 15MIN</th>
<th>NIGHT 30MIN</th>
<th>NIGHT 1HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBN F-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBN AC-130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDNI F-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT F-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT A-7 383TH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KRT A-7 354TH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKL F-111</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INKP OV-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBN OC-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTAPO 135</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 17
<table>
<thead>
<tr>
<th>BASE A/C</th>
<th>FOGS</th>
<th>RATE</th>
<th>TOTAL</th>
<th>ALERT</th>
<th>STRK</th>
<th>T.TIM</th>
<th>OTHER</th>
<th>ST</th>
<th>HH</th>
<th>KR</th>
<th>SVN</th>
<th>CHVY</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBU F-1</td>
<td>105</td>
<td>.68</td>
<td>71</td>
<td>0</td>
<td>46</td>
<td>125sp</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>UBN F-1</td>
<td>67</td>
<td>.57</td>
<td>53</td>
<td>0</td>
<td>34</td>
<td>6</td>
<td>(6)(4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>KKT F-1</td>
<td>25</td>
<td>.48</td>
<td>12</td>
<td>0</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>KKT F-7</td>
<td>26</td>
<td>.69</td>
<td>13</td>
<td>4</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>KKT F-7</td>
<td>39</td>
<td>.77</td>
<td>30</td>
<td>8</td>
<td>22</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>TKL F-111</td>
<td>48</td>
<td>.67</td>
<td>32</td>
<td>2</td>
<td>30</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>UBU AC-130</td>
<td>14</td>
<td>.66</td>
<td>12</td>
<td>1</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>SUB TOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>169</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHP F-1</td>
<td>25/12</td>
<td>.48/</td>
<td>12/5</td>
<td>28</td>
<td>12/5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/5</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>186</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KKT F-105</td>
<td>2h</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KKT EB-66</td>
<td>.29/</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KKB EC-47</td>
<td>20</td>
<td>.60</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U-21</td>
<td>1</td>
<td>.75</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBN RF-1</td>
<td>22</td>
<td>.73</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KKB OV-10</td>
<td>27/20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBU OV-10</td>
<td>5/31</td>
<td>1.03</td>
<td>37</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>NKP CH-53</td>
<td>9</td>
<td>.31</td>
<td>3</td>
<td></td>
<td>1</td>
<td>TRAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

**Figure 18**
the ADR function and equipment was transferred to the Comfy Gator operation on 16 May. The transfer resulted in the following changes:

- Sensor daily orbit coverage was reduced from 24 hours with ABCCC to 17 hours with Comfy Gator.

- The quality of the coverage of the sensor field improved due to the closer proximity of the Comfy Gator to the sensor field and the higher orbit altitude.

On 6 June, CINCPAC informed JCS of its intent to terminate sensor surveillance/Deployable Automatic Relay Terminal (DART) operations on 15 June unless otherwise directed. USSAG/7AF and CINCPACAF had previously concurred with the CINCPAC proposal to terminate. On 7 June, CSAF concurred with the CINCPAC proposal and requested AFLC to provide disposition instructions for DART/sensor assets. On 13 June, JCS requested CINCPAC delay termination actions pending approval from higher authority. On 16 June, CINCPAC directed that sensor surveillance operations be terminated. It also tasked USSAG/7AF to develop a plan for timely reinitiation of sensor operations should the need arise. On 21 June, USSAG/7AF recommended to PACAF that the Tactical Air Command's (TAC) Sensor Reporting Post (SRP) be tasked to provide future sensor surveillance if required. PACAF forwarded this recommendation to CSAF for
necessary action.

The Tactical Reconnaissance frag remained at 18 sorties per day through 11 June, and then was reduced to 16 lines. The sorties flown during April and May were evenly distributed between Laos and Cambodia. In June, 74 percent of the sorties were flown in Cambodia. Photographic coverage in Laos provided surveillance of major LOC's. In Cambodia, RF-4C's primarily satisfied target development and BDA requirements, but also included LORAN target development and high altitude Combat Thunder photography.

The AN/AAD-5 Infrared Reconnaissance Sensor (IRRS) was introduced in mid-May. A total of six RF-4C's were modified to accept the four available systems. In-theater evaluation of the AAD-5 commenced 12 June after the arrival of the TAC Introduction Team. These were the first night reconnaissance sorties to be flown in nearly two years and required that the daily sortie rate be temporarily reduced from 18 to 16 sorties. Reconnaissance aircraft operating in Laos continued to be escorted by a single F-4 throughout this period. Because of the continued level of post cease-fire operations, 7AF requested that the responsibility for the OPSEC program in
Thailand be given to 7AF.\textsuperscript{15} An additional manpower slot, dedicated to the OPSEC program, was also requested. With PACAF and 13AF concurrence, 7AF assumed responsibility for the Thailand OPSEC program.\textsuperscript{16} USSAG Headquarters Operating Instruction (HOI) 55-1, Operations Security, was published on 26 June. This HOI established the USSAG/7AF OPSEC Working Group whose responsibility was to monitor the entire Southeast Asian OPSEC Program.\textsuperscript{17}

**Secure Voice**

In April, JCS directed attention toward increased use of secure voice radio. Information was requested from all wings concerning their secure radio capability, normal usage, and equipment reliability. Based upon information received, 7AF directed all OV-10 FACs and secure voice equipped Fast FACs to use secure voice as their primary communications with ABCCC; and directed a wrap-up report detailing all attempted secure radio communications and results thereof. Those wrap-up reports were tabulated by 7AF into a three-phase test program to determine the feasibility and problem areas associated with the use of secure voice for all communications between FACs and ABCCC.
After five days (Phase I), the following results were compiled:

The test was discontinued on 8 June. The requirement to observe
communications security was still valid and maximum feasible use of secure voice was desired, except when such use would compromise the timeliness of tactical actions, safety or mission accomplishment. 18

**LAOS OPERATIONS**

On 2 April, the US Air Attache (USAIRA), Vientiane, Laos, requested the USSAG concept of operations for the employment of F-111 and B-52 radar beacons in Laos. USSAG replied that radar beacons for use by F-111 and B-52 aircraft would be located at secure sites in Laos to provide coverage for areas of concern to the Royal Laotian Government (RLG) and American Embassy. The beacons would be maintained by local Forward Air Guides (FAGs) with technical assistance from Combat Control Team (CCT) members from Det 1, 56th Special Operations Wing (SOW). The F-111 would be employed against preplanned and immediate targets utilizing those radar beacons. Preplanned targets within the beacon coverage would be generated from all intelligence sources and forwarded through appropriate channels to 7AF for final approval. The approved targets were then included in the fragmentary order from 7AF to the 474th TFW. The 474th TFW would compute range and bearing data off the appropriate beacon and complete radar prediction data
so that the strike could be completed even if the beacon was not acquired. Immediate targets were those of a high priority or fleeting nature and would be forwarded to AIRA (Painter Control) who would consider target priority and ordnance requirements in selecting a sortie for divert to the immediate target. Painter Control computed the range and bearing from the appropriate beacon and passed the information along with target coordinates and elevation to the aircrew. Beacons for both the F-111 and B-52 were located at three sites in Laos, Long Pot, Sala Phou Khoun, and Ta Viang.19

KHMER REPUBLIC

Two Khmer radar beacons with similar codes were located 25 NM apart. This could have caused confusion due to misinterpretation to the aircrew. On 8 April, the code of one of the beacons was changed to prevent this misinterpretation. Higher headquarters expressed concern that both F-111 and B-52 radar beacons were located on the American Embassy in Phnom Penh and the possibility that weapons could be released in the direct mode while using these beacons as offset aim points. They requested information on means to prevent this occurrence. To prevent the possibility of releasing in the direct
mode, the following specific F-111 aircrew procedures were utilized:

- The aircrews cross-referenced the run-in heading, relative position from the target, cross-hair positioning, fragged coordinates and any other information to insure that the beacon was not bombed.

- The axis of attack was planned from 10 to 40 degrees from the offset bearing.

- The beacon location derived from radar was required to fall within two NM of the beacon location derived from the inertial navigation system.

- At the start of the bomb run, the Weapons System Officer (WSO) depressed the target, then offset functions to insure the cross-hairs moved. He then monitored the sector to insure that the sector was moving in the proper direction.

- In addition to both crew members check to insure the offset button was depressed, the aircraft commander initiated a command-response check with the WSO prior to releasing the weapons to verify the offset mode was selected and that the sector was swinging in the proper direction.

- If the aircrew had any doubts as to the exact position in relation to the target or that the correct bombing location was not being used, they would abort the run and verify the information and selections.

As a further check to preclude errors in offset range and bearing which could result in bombing the beacon position, the following procedures were utilized:

- Range and bearing for preplanned targets were computer derived by the 474th TFW.
- Range and bearing for immediate targets were computed by two independent plotters from the Air Attache Office and the results were compared for accuracy.

- Additionally, the quadrant for bombing was called by radio to the aircrew. The crew would correlate this quadrant with target location and if a disparity existed, the run would be aborted.

On 11 April, the B-52 beacon located on the American Embassy was removed to preclude the possibility of direct mode bombing.

During May, beacon coverage was expanded in the Khmer with beacons installed at the following locations: Kampong Chhnang, Kampong Spoe, Odong, Kampong Cham, Pursat, and Mekong East (RVN). On 8 June, the beacon located at Hong Ngu, RVN, was removed. With the deactivation of Area Control in Phnom Penh, new procedures were instituted to provide range and bearing for strikes against immediate targets. This was accomplished by the TACC passing the eight digit UTM grids and the appropriate beacon number to a computer located at 7AF. The range and bearing were then computed from the beacon to the nearest foot and tenth of a degree. These computations were then passed to the F-111 aircrew for divert to an immediate target.20
OPERATION PAVE PHANTOM LEAD

With the increased intensity of hostilities in April, ARC LIGHT activities in Cambodia jumped from 20 cells per day to as many as 30. Greater reliance was placed upon Pave Phantom operations to support these strikes, which were conducted in areas of inadequate B-52 radar offset air points and outside area of coverage of the Ubon MSQ site.* ARC LIGHT drops southwest of Phnom Penh were restricted to nighttime over targets (TOT). It was necessary to operate eight 432nd TRW Pave Phantom aircraft out of Ubon since Udorn's runway was closed at night for repairs. On 21 April, B-52 strikes were compressed to effect 10 minute separations between TOTs. Pave Phantom support hit a peak on 24 April when 24 missions were fragged. During the week beginning 22 April, up to 74 percent of the daily ARC LIGHT missions were expended by Pave Phantoms. Enemy pressure on key points was relieved, due largely to this effort. On 29 April, weapon procedures were changed to utilize the Pave Phantom release advance feature in conjunction with a fragged desired mean point of impact (DMPI) as opposed to targeting the DPI, or first bomb impact.

* See USSAG/7AF History 15 Feb-31 Mar 73 pp 85-86
This procedure provided increased flexibility and decreased the frag generation time by one and one-half to three hours.

On 3 May, a Pave Phantom Lead conference was convened at Headquarters 8AF, Guam. Resultant procedural changes dealt with the rendezvous and station keeping distance. The rendezvous was changed to a modified point-parallel, whereby the F-4s turned 180 degrees from a head-on parallel course to place themselves two NM in front of the cell instead of one mile. Subsequent formation activities were conducted at 470 knots true air speed (KTAS), with 12,000 feet horizontal separation between the Pathfinder and the lead B-52. Dual-targeted operations were initiated on 28 May. Designated bomber cells struck two separate targets which were selected for relative location and timing, not to exceed 30 minutes. A greater number of targets would therefore be struck with correspondingly fewer B-52 cells.

ARC LIGHT activities in June averaged 21 cells per day. With the completion of the B-52 beacon bombing test in June, Pave Phantom support of the ARC LIGHT missions decreased slightly, yet F-4 support of the 8AF target allocation amounted to 51
percent of B-52 operations in the KR. Of the 298 targets fragged for Pave Phantom Lead, 242 were successful runs for a rate of 81 percent. Of the 56 unsuccessful runs, approximately 95 percent of those were associated with weather activity in the target area or during the approach to the target. No significant rendezvous problems were reported, due largely to the improved F-4/B-52 intercept procedures which became effective 12 May. The LORAN equipped F-4D aircraft, on loan to the 8TFW from the 432TRW, were redeployed to Udorn and Pave Phantom Lead missions were being flown from both Ubon RTAFB and Udorn RTAFB. Although the majority of the Pave Phantom Lead capability remained with the 8TFW, a limited capability existed with the 432TRW in the event Ubon should become non-operational. 21

HELICOPTER OPERATIONS

(U) During this reporting period, CH-53 heavy lift helicopters of the 21SOS, under operational control of USSAG, provided the following support: 22

- An immediate response capability to support OPLAN 5060A (Eagle Pull) was maintained throughout the quarter.

- Base defense support at Nakhon Phanom was a continuing requirement during this period. Other base defense support was limited to one-time responses to valid
requirements. A total of 229 sorties were flown with 328.6 hours logged.

- Military Civic Action Programs accounted for 24 sorties and 12.7 hours in airlifting medical and dental teams to remote areas.

- JCRC support required 43 sorties and 65.8 hours to provide insertion/extraction training.

- Security Service support utilized 64 sorties and 79.3 hours in resupplying remote sites.

- Explosive Ordnance Disposal (EOD) requirements accounted for 19 sorties and 21.9 hours.

- Other USAF support missions required 257 sorties and 436.1 hours.

**B-52 OPERATIONS**

ARC LIGHT operations continued in Cambodia at the request of FANK officials. Sortie rate was increased from 60 to 81 sorties per day during the period 23 to 28 April in order to support defense of Takeo, Kampot, and Kep. A sortie rate of 60 per day was resumed after heavy ground fighting in those areas was reduced. Emphasis was placed on supporting ship convoys on the Mekong River, truck convoys along Route 4, and restoring Routes 4 and 5 to FANK control.

Thunderstorms in the target areas caused a less than desired level of daily ARC LIGHT effectiveness during May with thunderstorms in the target area causing
interference on the LORAN Pathfinder missions. This situation was alleviated by scheduling priority strikes outside peak thunderstorm periods. Also, lower priority targets for alternate cells were provided in order to keep the SAC effective sortie rate up. ARC LIGHT bombers continued to evaluate the feasibility of using X-Band beacons as offset aiming points. Emphasis was placed on this project in order to expedite reduction in the number of Pathfinder sorties required. A test was conducted during late May and early June using a beacon as the primary method of bombing and Mobile Search Special (MSQ) radar guidance as a backup. Results were satisfactory. Beacon strikes were scheduled in areas not covered by MSQ radar. However, SAC imposed the restriction that target areas be cleared by three kilometers of all friendly elements when a beacon outside MSQ coverage was to be used. A reduction in sortie rate from 60 per day to 39 per day was accomplished on 28 May. This action was taken in order to reduce operating costs and relieve air traffic congestion in target areas. The capability to cover 20 targets each day was maintained through dual targeting. The basic plan provided for 3 cells (2 "G" and "D") launched from Guam and 10 B-52
cells from U-Tapao. Seven of the cells from U-Tapao were dual targeted; i.e., strike two targets, expending half the ordnance on each target. Other efforts to economize in B-52 Operations and alleviate air traffic problems were made when the USSAG Operations Division developed a procedure to strike two targets on one bomb run. The procedure was to be used whenever two targets were adjacent to each other and so aligned to make a single run on both targets possible. This procedure was defined as the Single Run - Dual Target Tactic.

Several problems were encountered with aircrews not receiving air strike warnings for ARC LIGHT strikes, or not receiving Airstrike Warnings (ASW's) in sufficient time to avoid the strike area. As a possible solution Hq USSAG directed B-52 crews to broadcast ASW's for their own strikes. However, 8AF declared an inability to comply with the procedures as outlined. A coordination conference was arranged and suitable procedures for SAC aircrews were developed. Effective 1 July, SAC aircrews would start broadcasting ASW's for their own strikes. Operations procedures for dissemination of ASW data to using agencies were also revised to alleviate problems encountered.
by 7ACCS in compiling information to be broadcast in the ASW. In addition, ASW data was amended to include ARC LIGHT cell colors. The SAC aircrew procedure, to notify ABCCC of intention to strike other than planned sequence, was revised to provide immediate and assured monitor and control of the ASW in the intended strike area. In late May, an error in transcribing target UTM coordinates from an Intelligence ARC LIGHT validation request transmittal sheet onto an operations target data card was not detected in proof reading the transcription. The incorrect target card was then used as the reference for drafting the validation request message which was submitted for FANX validation. The requested area was cleared for ARC LIGHT strike although it was, unknown to the FANX, 60 miles from the desired strike area which had been developed by the ARC LIGHT Branch. Ultimately, this target box was passed from one intelligence agency to another for F-111 target development, resulting in an accurate but unvalidated strike. This error and resultant strike prompted a change to operations validation request procedures and additional coordination between operations and intelligence agencies.

The internal procedures used in processing an ARC LIGHT validation request were revised on 2 June.
The new procedure was clearly established through a working checklist as opposed to the previously unwritten procedure. The most significant change to procedures was that the original intelligence target card would be photocopied onto a transmittal format which was transferred to operations. The intelligence transmittal sheet was the Operations Division's original document and became the single reference for construction of the operations target card (composed by the Operations Sergeant), and the request message which was composed by the administrative specialist. The target card was proofed against the Intelligence transmittal sheet (original data) and the validation request message was proofed against the target card resulting in a three-way crosscheck system. The target card transcription and proofing was verified by the action individual's initials. The entire process was monitored by the desk officer with the aid of a checklist. This would provide continuity whenever a desk officer duty changeover interrupts the process.

A high percentage of F-111 targets were developed within currently validated ARC LIGHT target boxes. Previously, Intelligence ARC LIGHT Targets
Branch passed the validated target areas to the Intelligence Tactical Targets Branch for F-111 strike development. Those targets were then fragged without direct coordination within the B-52 Operations Division, which is charged with the validation responsibility. After the incident of an F-111 striking a target within an unvalidated ARC LIGHT target box, the Director of Operations directed that the B-52 Operations Division was primary for passing validated ARC LIGHT target data to the Tactical Targets Branch. This would apply whenever F-111's targets were to be developed from current ARC LIGHT target boxes, or the F-111's were directed to back-up B-52 strikes identified as critical. In late June, ARC LIGHT Operations were relieved from river convoy support and shifted around Phnom Penh, Takeo, and the major lines of supply and support to those cities. For the last 10 days of the month, in anticipation of the halt to the bombing campaign in the KR, B-52 strikes were directed primarily against enemy troops in hotly contested areas.23

SURFACE PLANS

CINCPAC relieved COMUSMACTHAI of the responsibility for emergency evacuation of US non-combatants and certain designated aliens from Cambodia,
and charged COMUSSAG/7AF with that responsibility. The tentative COMUSSAG/7AF OPLAN 5060A, Eagle Pull, which provided for the evacuation, was distributed on 17 April. CINCPAC approved COMUSSAG/7AF OPLAN 5060A, subject to incorporation of a few changes. It was also suggested the plan title be redesignated to read: "COMUSSAG/7AF CONPLAN 5060C." This change, using the more descriptive term "CONPLAN" along with the suffix "C" for country identification, was adopted. The AMEMB, Vientiane, expressed a desire to upgrade the Noncombatant Emergency Evacuation (NEMVAC) plan for Laos. MACTHAI, the responsible command to plan NEMVAC for Laos, advised CINCPAC that the Laos plan should be updated and recommended that USSAG/7AF assume NEMVAC responsibility for Laos NEMVAC operations. After a planning conference held on 18 May, COMUSSAG/7AF advised CINCPAC that USSAG/7AF was prepared to take responsibility for the military planning and execution, when required, for NEMVAC Laos.

The updated Terms of Reference document for USSAG/7AF was published as USSAG Regulation 23-1. This document included succession to command, mission, terms of reference, and command relationships.

On 12 June, CINCPAC relieved COMUSMACTHAI
of the responsibility for NEMVAC operations in Laos and charged COMUSSAG/7AF with the responsibility. 29
A concept of operations similar to that of NEMVAC for Cambodia was to be used as a guide. The plan, COMUSSAG/7AF CONPLAN 5060L, was nicknamed TALON BLADE.
FOOTNOTES
CHAPTER III

1. Rpt (TS), USSAG/7AF (J-3), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 83.
2. Ibid.
3. Ibid.
4. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
8. Ibid.
9. Msg (S) CINCPAC to JCS, 060034Z Jun 73, Subj: Termination of Sensor Surveillance (U), GDS-Dec 81.
10. Rpt (TS), USSAG/7AF (J-3), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 83.
11. Msg (S) CSAF to CINCPAC, 071418Z Jun 73, Subj: Sensor Surveillance (U), GDS-Dec 81.
12. Msg (S) JCS to CINCPAC, 132151Z Jun 73, Subj: Delay Termination Actions Sensor Surveillance/ DART Ops (U), GDS-Dec 81.
15. Msg (S) USSAG/7AF to PACAF, 150325Z May 73, Subj: OPSEC (U), GDS-Dec 81.
16. Msg (U) PACAF to USSAG/7AF, 082300Z Jun 73, Subj: OPSEC (U).
17. Rpt (TS), USSAG/7AF (J-3), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 83.

18. Ibid.

19. Ibid.

20. Ibid.

21. Ibid.

22. Ibid.

23. Ibid.

24. Msg (C) CINCPAC to COMUSMACTHAI, 130156Z Apr 73, Subj: Evacuation Plan for Cambodia, GDS-Dec 79.

25. Rpt (TS) USSAG/7AF (J-3), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 83.

26. Msg (C) CINCPAC to COMUSSAG, 0202117Z May 73, Subj: Evacuation Plan for Cambodia (U), GDS-Dec 79.

27. Msg (C) MACTHAI to CINCPAC, 120446Z May 73, Subj: NEMVAC Operations (U), GDS-Dec 79.

28. Msg (C) COMUSSAG to CINCPAC, 280755Z May 73, Subj: NEMVAC Laos (U), GDS-Dec 79.

29. Msg (C) CINCPAC to COMUSSAG, 120220Z Jun 73, Subj: NEMVAC Laos (U), GDS-Dec 79.
MISSION

(U) During the period April–June 1973, the office of the Assistant Chief of Staff for Logistics (J-4) directed its effort toward the following goals.

- Continuation and enlargement of staff contacts with major SEA headquarters and Thailand based units.
- Full coordination with staff agencies of DAO, Saigon.
- Continued assistance to the JCRC.
- Maximum assistance to Chief, Military Equipment Delivery Team Cambodia (CHMEDTC) in support of Khmer enhancement programs.
- Special attention to the impact of short term, high level consumption rates of Petroleum, Oil and Lubricants (POL) and munitions.
- Close monitoring of high frag rate impact on maintenance parameters.

In support of these goals, the Assistant Chief and Deputy Assistant Chief of Staff, J-4 visited DAO, Saigon, HQ MACTHAI, HQ USARSPUTHAI, 13AF, and Chief MEDTC, Phnom Penh, in addition to those coordination visits conducted by division action officers. Accelerated emphasis on logistics support requirements for USSAG resulted in actions designed to improve security at
13AF bases in Thailand involving cross service support agreements; implementation of major construction projects at Nakhon Phanom (NKP) designed to upgrade living conditions and JCRC facilities; and rapid construction of a site for critical communications facilities. A major effort to assist MEDTC was initiated, to include liaison visits; monitoring of supply actions, aerial logistics support and special projects.¹

ENGINEER DIVISION

(U) All 13AF bases in Thailand were visited with the intent of:²

- Establishing liaison with USAF base engineers and their respective staffs.

- Becoming informed of future programmed work for projects which would restrict or curtail air operations.

- Physically observing conditions of runways and taxiways.

- Gathering information on programmed work for ammunition storage areas and viewing conditions of areas as related to current operations and contingency requirements.

(U) A liaison visit was made by the Chief, Engineer Division, to DAO, Saigon. During the visit information was exchanged with members of the Army Division, Engineer Branch, regarding the status of the following:³
- Dependent Shelter Program. This program committed the US to support 20,000 units per year over a five year period from 1971 thru 1975. As of 14 June, additional funds for the project were being held in abeyance awaiting a decision from the Secretary of Defense regarding the future of the program. As of 30 June, the program was 24 percent complete.

- Army Republic of Vietnam (ARVN) LOC Highway Projects. The primary objective of the LOC program was restoration of designated National (QL)/International (LTL) and Provincial (TL) highways. During the visit, the project was stopped for lack of POL. That logistics problem was solved and the project continued.

- DAO Construction Projects. A construction group consisting of a large number of American contractor personnel monitored the retrograde of equipment, DAO projects and emergency projects as required. They were primarily engaged in retrograding generators and other high-value items.

- Power Plan for RVNAF and DAO. The purpose of the plan was to evaluate the residual power needs for RVNAF and DAO to determine the most economical means to supply this power. At the close of this reporting period, attempts were being made to "hook on" to commercial power and retrograde the generator power plants as a means of accomplishing the optimum solution to the problem.

- Leases and Claims. DAO had 16 active lease agreements; 11 in Saigon and 5 outside Saigon. Eleven claims against the US Government remained to be resolved. Claim settlements were running 20.7 percent of annual rental. Pre-withdrawal planning was estimated at 30 percent of annual rental for claim settlement. It was anticipated that this figure would
increase since the remaining claims were large and would, most likely, be difficult to negotiate.

Field Operations of the Engineer Branch. A recent change in the Engineer Branch Field Operations Section was approved which created a consolidated section located in Saigon, rather than individuals being located in the various MRS. The Branch Chief felt this change would insure a more complete evaluation of contractor performance, as well as the Military Property Construction Office's and Engineer Direct Support Unit's ability to attain self-sufficiency.

PORT OF KOMPONG SOM RECONNAISSANCE

(U) A visit was made to the port of Kompong Som, Cambodia, for the purpose of conducting an on-the-ground reconnaissance of the port facilities and the adjacent munitions storage area. It was determined that the hastily constructed munitions storage area would be adversely affected by climatic conditions. Soil stability, additional drainage, and use of AM2 matting would be required in order to make maximum use of the site. It was further determined that the use of concertina wire would enhance the physical security of the munitions storage area and the port facility. The engineer data gathered during the visit was made a part of a combined trip report which was forwarded to MEDTC and CINCPAC. This information was evaluated in determining the feasibility of
expanding the cargo handling capability of the port.4

**COMMAND INTEREST CONSTRUCTION PROJECTS**

(U) The Engineer Division was instrumental in the initiation of command interest construction projects at NKP. The construction projects are listed below in order of priority as established by the COMUSSAG/7AF.5

- **COMPASS LINK (AN/MSC-46).** COMUSSAG/7AF established the requirement for a COMPASS LINK receive capability at NKP. Initially, it was planned to construct two ground terminals to satisfy this requirement. A "Soft-Site" was constructed by the Officer in Charge Construction (OICC) Thailand, and turned over to the user, STRATCOMTHAI, on 28 May. Based on COMUSSAG recommendations, CINCPAC recommended to JCS that plans for the "Hard-Site" be cancelled. The decision to proceed with construction of the "Hard-Site" was being held in abeyance pending reevaluation of the requirement by JCS.

- **JCRC Facilities.** JCRC confirmed requirement for additional administrative and covered storage facilities not available on base. A decision was made to construct a 40' x 100' concrete block structure for the administrative requirement and erect a 5,000 square foot pre-engineered building to satisfy the covered storage requirement. Project approval and funding from residual RVN military contract funds was pending decision at the Department of Defense (DOD) level.

Modular Dormitories. The influx of additional personnel on base to support the USSAG mission generated the requirement for more housing. The decision was made to erect two modular dormitories to ease the crowded condition. Vertical construction was begun on the NCO dorm and the grade
beams were placed at the officers dorm site. The target occupancy date for the dormitories was 1 August 1973. Red Horse* was accomplishing this work.

- NCO Club Improvements. The present facility housing the NCO Club was considered inadequate. The decision was made to renovate two existing structures and connect them by the construction of a kitchen complex. Red Horse was accomplishing this work and the target date for completion was 1 November 1973.

- Billets Upgrade/Repair. This was a base-wide upgrade and repair project to include air conditioning of sufficient dormitories to billet shift workers. It was expected that design monies would be released to OICC, Thailand.

(U) Between 1 April and 30 June, the Transportation Division monitored, developed, and assisted in all transportation matters concerning the USSAG mission. Aside from development of USSAG operations and contingency plans, the primary transportation effort was focused on the air and surface lines of communication into the KR. Airlift support for the KR was directed to strategic areas where LOC were subject to frequent interdiction by enemy ground force. The airlift support, primarily C-130 aircraft, involved both airdrop and airland delivery. Accumulation of airlift data was initiated on 11 April, and airdrop as of 29 April. Principal supplies delivered to the KR were ammunition, rice, POL (JP-4), and general cargo.

* Nickname for rapid engineering deployment and heavy operational repair squadron, engineering.
Ammunition and rice were the two major commodities dropped to locations at Takeo, Svay Rieng, Kompong Thom, Tram Khanr, and Romeas. Ammunition was airlanded at Phnom Penh, Ream, Kompong Chhnang, and Batdambang.

During the period 11 April through 29 May, 53 C-130 sorties were flown carrying 268,000 gallons of JP-4 to Phnom Penh. The POL airlift was suspended on 29 May, after the arrival of Mekong Convoy TP-42 on 28 May. Shown below are the major commodities airlifted/airdropped to the KR during the period 11 April through 30 June:

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>TONNAGE/GALLONS/NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammo</td>
<td>3,997 T</td>
</tr>
<tr>
<td>General Cargo</td>
<td>652 T</td>
</tr>
<tr>
<td>Howitzer</td>
<td>20 ea</td>
</tr>
<tr>
<td>Pierced Steel Planking</td>
<td>39 T</td>
</tr>
<tr>
<td>JP-4</td>
<td>268,000 Gal</td>
</tr>
</tbody>
</table>

AIRDROP**

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>TONNAGE/GALLONS/NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammo</td>
<td>2,072 T</td>
</tr>
<tr>
<td>Rice</td>
<td>1,786 T</td>
</tr>
</tbody>
</table>

* April - 30 June 1973
** April - 30 June 1973

MEKONG CONVOYS IN SUPPORT OF KHMER REPUBLIC

The importance of the Mekong River as the
primary LOC serving the KR was emphasized during April, May, and June 1973. A total of 10 convoys transited the Mekong River during this time frame to transport vital ammunition, POL, rice, and general cargo supplies to the capital city of Phnom Penh. The convoys, normally scheduled on a 10 day interval, consisted of eight regular and two special convoys. The two special convoys were to fill urgent ammunition, rice, and POL requirements. Shown below is a recapitulation of convoy composition by types of cargo carried:

<table>
<thead>
<tr>
<th>TP</th>
<th>DATE</th>
<th>PCL</th>
<th>CARGO</th>
<th>TUG/BARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>8-15 Apr 73</td>
<td>6</td>
<td>5</td>
<td>2 Ammo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 Rice</td>
</tr>
<tr>
<td>39</td>
<td>23 Apr 73</td>
<td>6</td>
<td>2*</td>
<td>1 Ammo</td>
</tr>
<tr>
<td>**S-7</td>
<td>28 Apr 73</td>
<td>-</td>
<td>-</td>
<td>1 Ammo</td>
</tr>
<tr>
<td>40</td>
<td>4 May 73</td>
<td>4</td>
<td>3</td>
<td>2 Rice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Ammo</td>
</tr>
<tr>
<td>41</td>
<td>17 May 73</td>
<td>6</td>
<td>1***</td>
<td>1 Ammo</td>
</tr>
<tr>
<td>42</td>
<td>28 May 73</td>
<td>7</td>
<td>1</td>
<td>1 Rice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Ammo</td>
</tr>
<tr>
<td>43</td>
<td>7 Jun 73</td>
<td>7</td>
<td>1</td>
<td>1 Ammo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 Cement</td>
</tr>
<tr>
<td>44</td>
<td>18 Jun 73</td>
<td>8</td>
<td>3</td>
<td>1 Rice</td>
</tr>
<tr>
<td>45</td>
<td>27 Jun 73</td>
<td>4</td>
<td>2</td>
<td>1 Rice</td>
</tr>
<tr>
<td>**S-8</td>
<td>30 Jun 73</td>
<td>3</td>
<td>2</td>
<td>2 Rice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Ammo</td>
</tr>
</tbody>
</table>
*TP-39 Cargo Ship ANGKOR WAT lost due to enemy fire.

***TP-41 Cargo Ship EVER SUCCESS lost due to enemy fire.

**Special convoy to fill urgent requirements.

Losses in GKR. Losses within territorial waters of Vietnam not included.

**KOMPONG SOM PORT SURVEY**

An on-site survey of port facilities at Kompong Som, KR was accomplished on 2 May, by members of USSAG. The purpose of the survey was to determine what additional equipment and enhancements would be required to permit the port to sustain a discharge of 740 S/T daily and 50,000 barrels of POL monthly. A follow-on report to the survey further examined the port facilities to determine maximum discharge capacity. Copies of the survey and report were provided to CINCPAC and Chief, MEDTC. 8

**INTERSERVICE SUPPORT AGREEMENT (ISSA)**

(U) An ISSA was being established between the host, 56th Special Operations Wing (SOW), and the tenant, USSAG/7AF and associated units. The ISSA covered the normal logistic support required by a tenant unit. The ISSA was signed by the two parties and forwarded to 13AF on 11 April. Headquarters 13th AF did not concur with the way the ISSA was written...
by the 56SOW and returned it on 21 May. The ISSA was being rewritten by the 56SOW as of 30 June. An ISSA was being established between the 56SOW and the JCRC. The ISSA covered the normal logistic support required by a tenant unit and maintenance support of certain items of equipment. The ISSA was signed by the two parties on 30 April, and forwarded to 13AF on 1 May. On 30 May, the ISSA was returned to the 56SOW for additional action. The ISSA was being rewritten by the 56SOW as of 30 June. JCRC requested, through USSAG, that an ISSA be established to provide maintenance support of three U-21 aircraft under the operational control of JCRC. The ISSA was being prepared by USARSUPTHAI as of 30 June. JCRC also requested that an ISSA be established to provide maintenance support for four types of communication equipment. The ISSA was being prepared by USARSUPTHAI as of 30 June.  

**OVERSEAS COORDINATING GROUP, THAILAND MEETINGS**

(U) The Overseas Coordinating Group (OCG), Thailand, was established by MACTHAI to promote and facilitate the Defense Retail Interservice Logistics Support Program in accordance with CINCPAC instructions. The OCG in Thailand included the senior logistical staff
officer of commands assigned in Thailand. The members of the OCG study, develop, coordinate and promote Interservice Support Agreements between units or services in Thailand. HQ USSAG membership was solicited on 24 April, and meetings were attended on 18 May and 15 June. At the 15 June meeting, USSAG representatives proposed that the Clothing Sales Facility at NKP stock US Army and US Navy military clothing. The 13AF representative concurred, and the action was being coordinated with the 56SOW.10

**STAFF VISIT TO DAO, RVN**

(U) A staff visit was made to DAO, RVN during 17-21 June to discuss Contract Administration functions and procedures, training of GVN employees in procurement/contract administration, DAO OPLAN 001, and procedures and policies for disposition of Government Furnished Equipment (GFE). A vast improvement was made in the overall contract administration/management area since last March. The audit trail to account for Army GFE title transferred to ARVN in January 1973 and since physically transferred or to be transferred to ARVN was still a problem. Contractor support in RVN continued to decline during the period of 1 April to 30 June. A summary of the decline between X day,
27 January 1973, and X+90, 27 April is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>X DAY</th>
<th>X+90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Contract Value</td>
<td>$255,000,000</td>
<td>$213,500,000</td>
</tr>
<tr>
<td>Contracts with US Firms</td>
<td>164</td>
<td>115</td>
</tr>
<tr>
<td>Contracts with TCN Firms</td>
<td>146</td>
<td>92</td>
</tr>
<tr>
<td>Contracts with LN Firms</td>
<td>34</td>
<td>23</td>
</tr>
<tr>
<td>Total Contracts</td>
<td>344</td>
<td>230</td>
</tr>
<tr>
<td>US Invited Contractors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSONNEL:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 Jan 73</td>
<td>12 May 73</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>5,237</td>
<td>3,898</td>
</tr>
<tr>
<td>TCN</td>
<td>2,056</td>
<td>1,146</td>
</tr>
<tr>
<td>LN</td>
<td>16,307</td>
<td>12,678</td>
</tr>
<tr>
<td>Total</td>
<td>23,600</td>
<td>17,722</td>
</tr>
</tbody>
</table>

**Drawdown of DAO Civil Service Personnel**

By JCS direction, the DAO, Saigon, developed OPLAN 001 to phase down the 1200 Civil Service personnel work force by 31 January 1974. The Defense Attache recommended the OPLAN not be executed for the following reasons:

- A true cease-fire had not occurred in RVN
- The support of USSAG missions in RVN by DOD representatives in-country was essential.
- Statutory and regulatory requirements, as well as fulfillment of US aspects of the peace keeping agreement, were not within
the capability of the residual military DAO of 50 personnel.

- Administration of the largest DOD Security Assistance Program in existence required in-country DOD programming and management.

- Completing Vietnamization quickly and thriftily required continuing DOD supervision.

The Defense Attache recommended that the DAO/DOD Civil Service personnel work force be reduced on the basis of events rather than a time phased program. He further recommended the DAO Civil Service force not be zeroed out by 31 January 1974. USSAG and CINCPAC concurred in the Defense Attache's recommendations. JCS supported the OPLAN and requested, by 15 June, an estimated number of residual DOD civilian billets required after 31 January 1974. JCS further requested the DAO OPLAN be revised by 15 July incorporating the following guidance:


- Terminate, transfer, and consolidate existing functions.

- Incorporate minimum number of DOD civilian personnel required in the residual DAO element into the OPLAN.

On 15 June, DAO announced that the minimum residual DOD civilian strength required would be 715 personnel.
Work was progressing smoothly on the revision to DAO OPLAN 001 in late June 1973.\textsuperscript{12}

**RVN Security Assistance Program**

As a result of the USSAG mission to monitor the DAO execution of the RVN Security Assistance Program, J-4 maintained surveillance over various activities during the last quarter of FY 73. The Military Assistance Service Funding (MASF) program for RVN, since 1966, was MASF Category I which was executed through military component service channels. MASF Category I procedures remained in effect in Vietnam through 30 June 1973, when the program transitions to MASF Category IV procedures. The Secretary of Defense outlined the MASF Category IV procedures to be implemented on 1 July 1973.\textsuperscript{13} Under MASF IV procedures, the DAO, Saigon, continued to coordinate planning and management of the MASF program in RVN while requirements and programming actions remained a service responsibility with requirements flowing through service channels to CINCPAC. However, a firm dollar ceiling was an inherent aspect of Category IV procedures. Category IV MASF was best described as a transition between MASF Category I and Military Assistance Program (MAP). While the conversion to Category IV MASF procedures would require
a heightened asset management effort in comparison to MASF I standards, they are a preview of even tighter controls which would be applied when MASF IV procedures were converted to MAP. Message traffic indicated that there was a possibility that the Vietnam Security Assistance Program may be MAP funded as early as FY 75.

The Army Division, DAO, conducted two reviews of the ARVN MASF program during May. The results of those reviews indicated that a total of $17,292,894 had been returned to the US Army for use by active Army forces. On 23 June, the Secretary of Defense announced the MASF budget ceiling for FY 74 in RVN. The assumptions used in developing the dollar ceiling were included, and a grand total of $1.0853 billion was established for the RVN Security Assistance Program.14

LOCATION/TRANSFER OF COMMUNICATIONS EQUIPMENT

(U) A project occupying this full reporting period was the location and transfer of communications equipment to meet requirements of the MEDTC. Two B-9 rectifiers were located within 13AF SEA assets and transferred to Phnom Penh. Ten GRT-25 and five GRT-16 radio transmitters and receivers, which were formerly 7AF property at Tan Son Nhut AB, RVN, were shipped to Phnom Penh from U-Tapao RTAFB, Thailand, where they
had been transshipped to await PACAF authorization to transfer. Nine PRC-74 radios and associated equipment were located at JUSMAGTHAI, Udorn, and arrangements were made for transfer to MEDTC. When received, they should complete the equipment list identified by MEDTC to equip a Direct Air Support Center (DASC).
FOOTNOTES
CHAPTER IV

1. Rpt (S) USSAG/7AF (J-4), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.

12. Msg (S) DAO, Saigon, to USSAG, 160825Z Jun 73, Subj: Residual DOD Civilian Strength (U), GDS-Dec 81.

13. Msg (S) SECDEF to CINCPAC, 222122Z May 73, Subj: Military Assistance for Laos and RVN (U), GDS-Dec 81.

14. Msg (S) SECDEF to CINCPAC, 231612Z Jun 73, Subj: MASF Budget FY 74 (U), GDS-Dec 81.

15. Rpt (S) USSAG/7AF (J-4), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 81.
CHAPTER V
COMMUNICATIONS-ELECTRONICS

SATellite TERMINAL OPERATIONS

(U) On 19 April, the Defense Communications Agency (DCA) recommended to the JCS that two AN/MSC-46 earth terminals be installed at NKP. On 8 May JCS tasked the Department of the Army to prepare a soft site and have operational MSC-46 serial number 7 at NKP by 30 June. In order to provide this quick reaction, US Army Strategic Command (STRATCOM) coordinated with OICC, Thailand, to construct the site. Site construction was started on 12 May and the site was made available for occupancy on 28 May, although construction continued until 20 June. Commencing on 20 May, STRATCOM, Thailand and the Officer in Charge of the satellite terminal began the reconditioning and the reconstruction of the earth terminal. On 5 June, erection of the terminal began and was completed by 12 June. At that time the testing of the system was begun.

(U) As a part of JCS tasking, the USAF was tasked to upgrade the COMPASS LINK* mission equipment. This upgrade was scheduled for completion on 13 July. In addition, it was necessary to upgrade the LINK between

* A system for transmission of photoimage (color or black and white) from SEA to the US via satellite.
the van and the satellite terminal. This was accomplished by PACOM area Engineering and Installation (E&I), and was completed on 27 June 73. In order to support the COMPASS LINK imagery requirement, the NKP Photo Lab was upgraded on 27 June. Due to technical difficulties with the electronics in the earth terminal, the MSC-46 was not operational by 30 June.3

**BASE DEFENSE**

(U) COMUSSAG assumed an interest in the base defense posture, and J-6 was closely monitoring base defense communications. At a special base defense meeting held at NKP on 23 April, two specific communications deficiencies were cited: perimeter landline handphone communications were inadequate, and the Security Police Radio Net was easily overloaded when excess traffic jammed the net in a crisis. The landline problem was being resolved by acquisition of four L55 switchboards. The 1987th Communications Squadron submitted programming documentation for the switchboards. The estimated in place date was FY 74. Resolution of the radio communications deficiencies presented a more difficult task. Those same radio net problems were common to ground SP forces at the majority of Thailand bases.
The acquisition and recrystalization of 4-channel non-tactical radio (NTR) equipment, previously used in Vietnam, was the most expeditious means of accomplishing a common SP network while concurrently resolving the NKP base defense radio communications problem. Coordination actions between interested agencies were voluminous; the majority of equipment destined for NKP from Vietnam had to be traced, host country agreement regarding ultimate assigned common frequencies had to be reached and, inherently, a decision regarding the dollar impact of extensive recrystalization was necessary. During May and June, NTR equipment from Vietnam arrived in sufficient quantities to permit providing the SP an adequate system. During the latter part of June, four frequencies were assigned and the decision to recrystalize one channel on each NTR was reached by 13AF ADVON SP. On 19 June, the 1987th Communications Squadron submitted a funding request to the NKP Base Procurement Office for the purpose of repairing, recrystalizing, and installing a new 4-channel net. It was estimated that 45 days would be required for completion of project. Estimated completion was mid-August 1973.
BLUE CHIP COMMUNICATION

In May, USSAG/J-6 began investigation into the long outages occurring on the Blue Chip/ABCCC high frequency Secure Teletype Net. Coordination between USSAG/J-3 and 13ADVON/DCO resulted in these actions:

- A request for a propagation study from HQ AFCS. Estimated completion date was 10 Jul.

- Various frequency packages (sets of 10 different HF frequencies) were tried. These packages significantly reduced, but did not completely eliminate, the outages.

- A successful HF voice test was conducted from the Ubon Royal Thai Air Base Military Affiliate Radio Service (MARS) radio site using its normal MARS frequency, 27994KH2. The 13ADVON was studying the feasibility of establishing the Ubon Remote Radio site as the radio link for this net. No decision was made as of 30 June.

On 25 April, a request from COMUSSAG was forwarded to CINCPAC to establish a secure teletype link between 7AF TACC and VNAF TACC. JCS approval was received on 23 May. Equipment for the Vietnamese end of the circuit was already available in-country. The Air Force Cryptologic Depot shipped compatible secure equipment to NKP on 15 June, and Base Civil Engineer support was completed on 25 June. Estimated activation of the circuit was 15 July.
(U) The assignment of joint frequencies and call signs for JCRC use was obtained by USSAG/J-6 submission of joint frequency requests through COMUSMACTHAI, to CINCPAC. USSAG J-6 assistance was also instrumental in obtaining personnel and equipment (AN/MRC-108) augmentation from Det 1, 565OW Udorn, to supplement the JCRC field exercise and training program during May and June. This action was necessary because all personnel and equipment authorized for the JCRC were not yet in place.

Four unused positions in the Blue Chip Command Post were assigned for JCRC use. An engineering study by PACOM Area E&I was requested by USSAG J-6 through CINCPAC to engineer a JCRC communications capability based on the JCRC mission requirements and compatibility with Blue Chip support. As a result of E&I on-site assistance, designated schemes were assigned to configure existing UHF/VHF/HF radio equipment to satisfy the JCRC requirements. Installation of those schemes was currently in progress. A firm completion date was dependent upon receipt of antenna poles from Okinawa, where they were being delayed by a dock strike. Estimated completion date was FY1/74.6
COMMUNICATIONS SECURITY EDUCATION PROGRAM

(U) CINCPAC requested that USSAG review its COMSEC education program to insure that it was designed to achieve and maintain the highest possible standards of COMSEC awareness. USSAG, being a relatively new organization, did not have an established COMSEC education program. Thus, J-6 began developing a concept for a program which would establish a continuing, realistic, and effective COMSEC effort. Meetings, chaired by J-6, were held during June to further define what the program should encompass. Attendees included personnel from 1987th Comm Sq, Defense Attache Office, Saigon, a DOD special representative, and USSAG representation from J-2, and J-3. During June, General Hughes, USSAG Chief of Staff, announced the USSAG Communications Security Program, emphasizing the need for such an effort, and soliciting the name of a project officer for each major staff office. A USSAG KOI was also developed, and the draft was in the process of being refined. When implemented in July, the program would require an initial COMSEC briefing within 10 days of assignment of all new personnel, testing, follow-up refresher training, and an advertising campaign to include posters, daily bulletin
notices, warning stickers on telephones, and dissemination of threat information pertaining to the enemy monitoring USSAG communications. In addition, it would include periodic requests by USSAG for monitoring of CINCPAC's objectives, as well as other requirements delineated in Air Force directives.
FOOTNOTES

CHAPTER V

1. Memo (S) DCA to JCS, 19 Apr 73, Subj: Installation of AN/MSC-46 Terminals (U), GDS-Dec 81.

2. Msg (S) JCS to CSA, 0814922 May 73, Subj: Installation of AN/MSC-46 Terminals (U), GDS-Dec 81.

3. Rpt (C) USSAG/7AF (J-6), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 79.

4. Ibid.

5. Msg (S) COMUSSAG to CINCPAC, 250730Z Apr 73, Subj: VNAF Teletype Link (U), GDS-Dec 81.

6. Rpt (C) USSAG/7AF (J-6), 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 79.

7. Ibid.
CHAPTER VI
JOINT CASUALTY RESOLUTION CENTER

MISSION

(U) During this reporting period, the JCRC began actual operations in consonance with its mission of resolving the status of US missing in action (MIA) and bodies not recovered (BNR) personnel. This was accomplished by conducting operations to locate and investigate crash/grave sites and to recover remains, as appropriate, throughout SEA. The major activities in support of the mission were fourfold:

- Commencing field operations to search for, retrieve, and forward remains, when found, to the Central Identification Laboratory (CIL), Samae San, Thailand, for positive identification and shipment to next of kin.

- Participating in negotiations with the Four Party Joint Military Team (FPJMT) designed to return US servicemen who died in captivity to US control, for subsequent shipment to next of kin. JCRC personnel participated in two planning trips to North Vietnam on 11 and 18 May. These trips included visits to Van Dien and Ba Huyen cemeteries where US personnel, who died in captivity, were buried.

- Providing the US Delegation, FPJMT, guidance and priorities in negotiations involving casualty resolution, and aggressively pursuing negotiations in Laos through the newly established JCRC Liaison Officer on the AMEMB staff in Vientiane.
Continual updating and seeking all available information on each MIA/BNR from every possible source to ensure completeness of records and to facilitate search and identification of personnel.

(U) Brig Gen Robert C. Kingston, who activated the JCRC on 23 January 1973, continued in command during this reporting period. The General's liaison trips to the Embassies in SEA, with the exception of the KR, continued on at least a bimonthly basis to ensure cooperation and assistance in the JCRC mission. General Kingston presented an update briefing to the US Ambassador, KR, at JCRC Headquarters. Four major personnel actions occurred during the quarter which had a significant impact on the unit:

- Col Vincent DiMauro, USAF, became Deputy Commander for Staff Operations, replacing Col E. Lloyd Murphy who rotated to the states. Colonel DiMauro came to JCRC from his position on the DOD MIA/POW Task Force, where he had served for the past three years. His previous assignment provided DOD perspective on the mission and knowledge of the attitude and concerns of the next of kin with whom he had frequent contact.

- Col Thomas Henry, USA, was assigned as Liaison Officer, Vientiane, and on 2 May, was authorized to move to the Laotian capital to operate as the primary casualty resolution officer on the Embassy staff.

- Col Ralph D. Wallace, USMC, replaced Col John V. Hanes, USMC, as Liaison Officer, Hanoi, on 13 June. Colonel Wallace
continued working, as his predecessor had, in Saigon with the FPJMT. By attending the FPJMT meetings and being directly involved in negotiations with the DRV, he had continued to establish his position with a goal of moving to Hanoi to operate as a JCRC Liaison Officer in North Vietnam.

- Several organization changes occurred during the period. (See Figure 19). Primary changes involved establishment of a liaison office in Vientiane, realignment of the Casualty Data Division, and incorporation of launch unit functions in each of the control teams of the JCRC Field Operations.

- As a result of the continual refinement, updating, and in-depth analysis, the work load data (MIA, BNR, crash sites) continued to fluctuate. (See Figures 20, 21, and 22).

- One of the most significant actions during the quarter was JCRC's effort to improve on its data base. JCRC requested each of the services to supply, on a one-time basis, all data available on each case for all MIA and KIA/BNR personnel. Although CINCPAC was queried on 26 May, none of the services had responded by 30 June.

**EXECUTIVE FUNCTIONS**

(U) Commander Vincent S. Mazzola, USN, replaced Commander David Howells, USN, as Executive Officer on 20 June. The Executive Officer's direct involvement in administration, comptroller, and logistics activities was designed to provide more supervisory latitude to the Deputy Commander for Staff Operations. 2
<table>
<thead>
<tr>
<th></th>
<th>SVI7</th>
<th>NVN</th>
<th>LAOS</th>
<th>CMR</th>
<th>AT SEA</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMY</td>
<td>254</td>
<td>0</td>
<td>67</td>
<td>19</td>
<td>2</td>
<td>342</td>
</tr>
<tr>
<td>NAVY</td>
<td>5</td>
<td>116</td>
<td>14</td>
<td>0</td>
<td>10</td>
<td>145</td>
</tr>
<tr>
<td>AIR FORCE</td>
<td>61</td>
<td>305</td>
<td>274</td>
<td>7</td>
<td>17</td>
<td>664</td>
</tr>
<tr>
<td>USHC</td>
<td>68</td>
<td>19</td>
<td>14</td>
<td>0</td>
<td>9</td>
<td>110</td>
</tr>
<tr>
<td>US CIV</td>
<td>14</td>
<td>1</td>
<td>11</td>
<td>5</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>TOTAL</td>
<td>402</td>
<td>441</td>
<td>380</td>
<td>31</td>
<td>38</td>
<td>1,292</td>
</tr>
<tr>
<td></td>
<td>SVN</td>
<td>IVN</td>
<td>LAOS</td>
<td>CAB</td>
<td>AT SEA</td>
<td>TOTAL</td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>ARMY</td>
<td>262</td>
<td>5</td>
<td>55</td>
<td>21</td>
<td>28</td>
<td>371</td>
</tr>
<tr>
<td>NAVY</td>
<td>33</td>
<td>71</td>
<td>30</td>
<td>0</td>
<td>167</td>
<td>301</td>
</tr>
<tr>
<td>AIR FORCE</td>
<td>128</td>
<td>74</td>
<td>100</td>
<td>10</td>
<td>23</td>
<td>335</td>
</tr>
<tr>
<td>USMC</td>
<td>130</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>40</td>
<td>180</td>
</tr>
<tr>
<td>US CIV</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>560</td>
<td>153</td>
<td>192</td>
<td>31</td>
<td>249</td>
<td>1,195</td>
</tr>
</tbody>
</table>

**AS OF 30 JUN 73**
ADMINISTRATION

(U) Personnel strength in JCRC increased over the quarter from 117 on 31 March to 136 on 30 June. Existing shortages were not considered critical due to lack of authority to perform casualty resolution operations throughout SEA. Three TDY Laotian Interpreters were returned to their home stations. On 19 April, a proposed revision to the JCRC Joint Table of Distribution was submitted to COMUSSAG. The proposal included an increase of 21 military spaces and a reduction of one local national space, an overall increase of 20 spaces. JCS approved the requested increase in authorizations to 199 personnel.³ On 11 June, JCRC requested the Public Affairs Office JTD position be converted from Army (LTC) to Air Force (LTC).⁴ The change had not been approved by 30 June. During April, a thorough review of all JCRC space requirements was conducted to determine additional requirements based on personnel strength and work requirements. The Base Facilities Board determined that JCRC had a legitimate need for additional space and requested use of a 50-foot by 100-foot pre-engineered building at NKP.⁵

COMPTROLLER

(U) The JCRC budget submission and presentation was made to CINCPAC on 11 April. The submission was
approved in the following amounts:*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 73</td>
<td>$534,800</td>
</tr>
<tr>
<td>FY 74</td>
<td>$2,632,500</td>
</tr>
<tr>
<td>FY 75</td>
<td>$2,620,100</td>
</tr>
</tbody>
</table>

* Figures do not include military personnel costs.

JCRC was granted $130,000 for Fourth Quarter FY 73 operations. This brought the total FY 73 CINCPAC authorizations to $380,000. JCRC also received $235,600 for special equipment purchased in April. In June, JCRC was tasked with funding the offshore casualty resolution operation sponsored by the Navy Ships System Command in the amount of $406,000. The total accountable cost for JCRC in FY 73 was $756,000.6

**OPERATIONS**

(U) It was during this reporting period that the first casualty resolution operations were launched by JCRC personnel. Teams visually inspected four crash sites (Long An, 5-9 May; Bac Lieu, 11-19 May; Phu Yen, 31 May-4 Jun; and Da Nang, 26 Jun-1 Jul). The teams also accomplished four grave site recoveries (Tuy Hoa, 31 May-4 Jun; Phong Loc, 3 Jun; Kein An, 5 Jun; and Dong Binh, 22 Jun). During the quarter, an OPLAN was developed and approved for picking up the remains of US personnel who died in captivity in North Vietnam. In the interest of expediting thorough coordination,
DAO, Saigon, defined the sequence of events required for JCRC coordination with the AMEMB and the FPJMT prior to conducting casualty resolution operations in RVN. In early June, JCRC provided CINCPAC with an interim schedule of rewards for information leading to the finding of Americans missing in action and bodies not recovered. In an effort to get into crash/grave sites in the PRG controlled areas, JCRC proposed an operation in the Loc Ninh area. No reply had been received by 30 June.

CASUALTY DATA DIVISION:

In April, as a follow-on action to Operation Homecoming, all POW release records were reviewed and information was compiled which would broaden the data base for personnel believed to be in the following categories:

- Personnel believed to have died in incident.
- Personnel believed to be alive.
- Personnel believed to have died in captivity, but whose names did not appear on PRG or DRV lists.
- Personnel believed to be alive and probably captured.

The action was broadened in May to review all JCRC dossier holdings to provide complete data to the FPJMT on personnel lost in SEA. The following categories
were used to separate these records:

- Category A - Those personnel who were known to have been alive at one time in enemy held territory, and about whom there was no subsequent information.

- Category B - Those personnel who were known to have been alive in hostile or contested territory (or to have successfully ejected over hostile territory) and about whom there is reasonable evidence that they subsequently died and whose names have never been released by the former opposing forces.

- Category C - Those personnel who were known to have died in enemy held territory (such as in an air crash or in a ground incident/action), and who it was believed the enemy might have information as to the disposition or location of remains.

- Category D - Those personnel who it was believed the enemy had captured, and documents and/or analysis of the incident support those indications.

Over 2,000 messages pertaining to POW release Phases I, II, and III debriefings were screened in April alone. Significant data was entered into the Automatic Data Processing (ADP) data base so it would appear on subsequent print outs. Pertinent basic documents were placed and cross referenced in appropriate dossiers. Throughout the quarter, debriefing messages were reviewed, evaluated, and applicable information was extracted and incorporated into JCRC records. Also early in the quarter, a program of correlating data in
the casualty resolution master files with data at the Central Identification Laboratory was initiated. This was done to ensure those records were compatible, and to update data recorded in the ADP data base. All service and civilian third country national records at the CIL were reviewed and, when necessary, the CIL requested medical, dental, and dental X-ray records from appropriate agencies.10

The Crash Site Development Branch produced a total of 18 crash site packages for RVN during the quarter; five in April, three in May, and ten in June. Each package contained all available information on a crash site; those individuals involved in the crash, circumstances, previous search results, current order of battle information, terrain and weather analysis, maps, and photographs when available. In June, review of information on crash sites shifted to Laos. There were 228 sites categorized and posted for operational planning. An additional 41 sites were marked for further research and clarification. Sixteen skeletal target packages for Laos were initiated in preparation for approval of operating authorities and to provide the field teams with a starting point. To facilitate obtaining order of battle information to be used in developing crash site packages, a system was established
to provide information flow and a standardized format for order of battle requests. A standard Essential Elements of Information (EEI) reply format was established. The system was established in coordination with USSAG Intelligence Division.11

The Automated Data Processing Branch designed a system for obtaining ADP print outs of crash sites. By the end of April, computer crash site print outs were produced for RVN, North Vietnam, and Cambodia. The Casualty Records Branch and the Data Analysis Branch completed a manual review of personnel dossiers on hand (over 1000) to develop a master register of crash sites, by military region, in RVN. The sites were plotted on wall maps by category, and with verified coordinates based on the manual review. In addition, maps of crash sites in each RVN MR, were provided to the US Embassy, Saigon. An annotated computer print out of crash sites in each MR and a copy of the master register were also provided. Those materials were designed to be used by the US Consul Generals in each Province to assist in JCRC operations in their areas of responsibility.

Intelligence reports were continuously received and reviewed by the Data Analysis Branch. In May alone, 82 reports were evaluated for possible correlation,
of which 60 were directly linked to personnel carried in JCRC files. To ensure accuracy of records, all service status changes were annotated as they were reported. In May, the following changes were made:

**US Army**
- 19 personnel from MIA to KIA/BNR
- 2 personnel from KIA/BNR to body recovered

**US Navy**
- 17 personnel from MIA to KIA/BNR
- 1 person from captured to KIA/BNR

**US Air Force**
- 31 personnel from MIA to KIA/BNR
- 1 person from BNR to MIA
- 12 personnel removed from system

**US Marine Corps**
- 6 personnel from KIA/BNR to body recovered

**US Civilians**
- 4 personnel from MIA to captured
- 2 personnel from KIA/BNR to MIA
- 3 personnel from captured to MIA
- 5 personnel from captured to KIA/BNR

The following tabulation reflects the service status determinations in June:

**US Army**
- 8 personnel from MIA to KIA

**US Air Force**
- 18 personnel from MIA to KIA
- 7 personnel from captured to MIA
- 1 person from KIA to MIA
- 2 personnel added as MIA
- 1 person added as BNR

**Third Country Nat'l**
- 2 persons added as MIA
- 2 persons added as BNR
- 1 person added as captured

During June, a member of the Casualty Data Division reviewed records of the Contemporary Historical
Examination of Current Operations (CHECO) office at Udorn. CHECO maintained microfilmed records of air search and recovery (SAR) efforts, major combat command duty logs, and similar historical data for air operations in SEA. The JCRC representative reviewed more than 26,800 microfilm frames for information of value to JCRC. By the end of June, information on 324 sites had been obtained. This project was to continue into July.13

In June, representatives of the ADP Branch visited the US Embassy, Saigon, to acquire information for design and documentation of a printer plotting system to apply to the Hamlet Evaluation System. This data, concerning the attitude of hamlet populations toward the GVN/PRG, would be incorporated into the planning for field operations and the public communication effort. The JCRC data base was further expanded in June by the acquisition of the CINCPAC computer tape listing all aircraft losses in SEA. This information was previously available only in print out form from CINCPAC. By placing this tape in the computer data base, JCRC was able to obtain information on a specialized inquiry basis without time delays associated with transmitting requests to and from CINCPAC. The
ADP Branch initiated a computer program in June which provided column headings in the French language for use by the US Embassy, Vientiane, in dealings with the RLG and Pathet Lao. A similar program in the Vietnamese language was developed for use in Saigon by the FPJMT.\textsuperscript{14}

On 9 June, a special test of the Camouflage Detection Infrared system was conducted, using a US Navy RF-8 aircraft equipped with split 12-inch cameras. Ground (earth) samples were to be obtained in July. Results of both tests were to be returned to the Aeronautical Systems Division, Wright-Patterson AFB, Ohio, for analysis. The purpose of the test was to attempt to correlate aberrations in foliage color to soil contamination created by crash site wreckage. If successful, this system would provide an additional mechanism for JCRC to use in locating crash sites. In a similar test, AAD-5 (an infrared sensor system under operational evaluation in RF-4 aircraft) would also be used. This system was currently being tested by the USAF for normal tactical use. However, some crash site locations would be included in this testing in order to determine if the system could also be employed to support the JCRC mission.\textsuperscript{15}
FOOTNOTES

CHAPTER VI

1. Rpt (C) Hq JCRC, 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 79.

2. Ibid.

3. Msg (U) JCS to USSAG, 120027Z May 73, Subj: Revision of JTD for JCRC (U).

4. Msg (U) JCRC to CINCPAC, 110700Z Jun 73, Subj: Revision to JTD for JCRC (U).

5. Msg (U) 56CSG to 13AF, 311430Z May 73, Subj: JCRC Administrative Facilities (U).

6. Rpt (C) Hq JCRC, 1 Apr-30 Jun 73, Subj: Historical Report (U).

7. Msg (C) DAO, Saigon, to USSAG/JCRC, 030830Z May 73, Subj: Status of Casualty Resolution Operations In RVN (U), GDS-Dec 79.

8. Msg (C) USSAG/JCRC to CINCPAC, 070615Z Jun 73, Subj: Interim Schedule of Rewards for Information (U), GDS-Dec 79.

9. Msg (C) USSAG/JCRC to AMEMB, Saigon, 071045Z Jun 73, Subj: FPJMT Negotiations of Casualty Resolution (U).

10. Rpt (C) Hq JCRC, 1 Apr-30 Jun 73, Subj: Historical Report (U), GDS-Dec 79.

11. Ibid.

12. Ibid.

13. Ibid.

14. Ibid.

15. Ibid.
CHAPTER VII
HEADQUARTERS COMMANDANT

COMMANDANT

(U) The operation of this staff section remained unchanged during the period and coordination with base support agencies continued to be the primary function of the office. The location of the Commandant's office was changed from rooms 171/172 in the main building to room 305 in the trailer complex to allow the incoming Inspector General to occupy space more conveniently located to the Command Group.

BUDGET OFFICER

(U) On 10 April, the Budget Officer delivered the USSAG FY 74 Apportionment Request and FY 75 Budget Submission to CINCPAC. Funding of $1.7 million was requested for FY 74. CINCPAC requested that COMUSSAG review FY 73 requirements and advise CINCPAC of additional operations and maintenance, Navy (O&M,N) funds which could be obligated.² USSRAG requested $38,000 in additional funds for FY 73, for a total FY 73 obligational authority of $538,000.³ The additional funding was granted by CINCPAC on 30 May. During June, it could be seen that expenses would not be as great as anticipated. As a result COMUSSAG recommended immediate
withdrawal of $17,000.  

CINCPAC withdrew the $17,000, leaving USSAG with total FY 73 O&M,N funding of $521,000. Of the $500 in Navy Contingency Funds allotted to USSAG by CINCPAC, only $250 was obligated. COMUSSAG stated that $190 was available for immediate withdrawal but no reply was received.

**HEADQUARTERS SQUADRON SECTION**

(U) There was no change in personnel during this period but the Squadron Commander, Maj James E. Speight, departed permanent change of station on the last day of the period. The new Commander was not scheduled to arrive until approximately mid-July. The orderly room was fully operational and processed 296 ordinary leave requests and 14 emergency leave requests during this period. Ration Cards were re-issued to all personnel at the start of the period and an inspection by the Base Ration Control Center Personnel was rated outstanding, as was control of the Meal Cards. The orderly room began administering the weight control program and there were nine personnel under the program at the end of the period. There were changes in barracks allocation during the period. JCRC requirements increased, and base billeting assigned an additional barracks for their use. This raised the total barracks under USSAG control to 16 (1 12-man, 9 24-man); however, in coordination with
the JCRC, three of the 32-man barracks were placed under their direct control and all property transferred to their account. This effectively reduced USSAG to 13 barracks with 324 spaces. Additional equipment and furniture was procured and all barracks were fully equipped. Some of the furniture shipped in from Vietnam was in poor condition and a replacement program was in effect. The program to improve the barracks continued with work orders submitted to the Base Civil Engineer for repair of water pipes, roofs, screens, latrines, fans, lights and switches. A work order was submitted for repair of all porches. A self-help program resulted in some repair and the repainting of all doors and part of the exterior of the buildings. Inspection of the barracks by base medical personnel resulted in an excellent rating. An overall renovation program for the barracks, with possible air conditioning of some, was being developed by the Engineer Division of the J-4 staff in coordination with the Base Civil Engineer.
FOOTNOTES
CHAPTER VII

1. Rpt (U) USSAG/7AF (DT), 1 Apr-30 Jun 73, Subj: Historical Report (U).

2. Msg (U) CINCPAC to USSAG, 230044Z May 73, Subj: Obligation of OM&N Funds (U).

3. Msg (U) USSAG to CINCPAC, 300102Z May 73, Subj: Request for additional OM&N Funds (U).


5. Msg (U) USSAG to CINCPAC, 130145Z Jun 73, Subj: Withdrawal of Contingency Funds (U).

6. Rpt (U) USSAG/7AF (DT), 1 Apr-30 Jun 73, Subj: Historical Report (U).
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Anti-Aircraft Artillery</td>
</tr>
<tr>
<td>ABCCC</td>
<td>Airborne Battlefield Command Control Center</td>
</tr>
<tr>
<td>ABF</td>
<td>Attack By Fire</td>
</tr>
<tr>
<td>ADP</td>
<td>Automatic Data Processing</td>
</tr>
<tr>
<td>ADR</td>
<td>Automatic Data Relay</td>
</tr>
<tr>
<td>AFLC</td>
<td>Air Force Logistics Command</td>
</tr>
<tr>
<td>AFMPC</td>
<td>Air Force Military Personnel Center</td>
</tr>
<tr>
<td>AFOUA</td>
<td>Air Force Outstanding Unit Award</td>
</tr>
<tr>
<td>AFR</td>
<td>Air Force Regulation</td>
</tr>
<tr>
<td>AFSSO</td>
<td>Air Force Special Security Office</td>
</tr>
<tr>
<td>AGE</td>
<td>Aerospace Ground Equipment</td>
</tr>
<tr>
<td>AIG</td>
<td>Air Intelligence Group</td>
</tr>
<tr>
<td>AMENB</td>
<td>American Embassy</td>
</tr>
<tr>
<td>ARDF</td>
<td>Airborne Radio Direction Finding</td>
</tr>
<tr>
<td>ARVN</td>
<td>Army, Vietnam</td>
</tr>
<tr>
<td>ASH</td>
<td>Air Strike Warning</td>
</tr>
<tr>
<td>BDA</td>
<td>Bomb Damage Assessment</td>
</tr>
<tr>
<td>BHR</td>
<td>Bodies Not Recovered</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>COBO</td>
<td>Common Business Oriented Language</td>
</tr>
<tr>
<td>CEC</td>
<td>Circular Error Average</td>
</tr>
<tr>
<td>CECO</td>
<td>Controlled Collection Objectives</td>
</tr>
<tr>
<td>CHECO</td>
<td>Contemporary Historical Examination of Current Operations</td>
</tr>
<tr>
<td>CMDFTC</td>
<td>Chief, Military Equipment Delivery Team, Cambodia</td>
</tr>
<tr>
<td>CIDG</td>
<td>Civilian Irregular Defense Group</td>
</tr>
<tr>
<td>CIL</td>
<td>Central Identification Laboratory</td>
</tr>
<tr>
<td>CINCPAC</td>
<td>Commander-in-Chief Pacific Command</td>
</tr>
<tr>
<td>CINCFLT</td>
<td>Commander-in-Chief Pacific Fleet</td>
</tr>
<tr>
<td>CINCPACFLT</td>
<td>Commander-in-Chief United States Army Pacific Command</td>
</tr>
<tr>
<td>COBOL</td>
<td>Combat Operations Center</td>
</tr>
<tr>
<td>COC</td>
<td>Communications Intelligence</td>
</tr>
<tr>
<td>COMSEC</td>
<td>Communications Security</td>
</tr>
<tr>
<td>COUSSAG</td>
<td>Commander, United States Support Activities Group</td>
</tr>
<tr>
<td>CONPLAN</td>
<td>Contingency Plan</td>
</tr>
<tr>
<td>CONUS</td>
<td>Continental United States</td>
</tr>
<tr>
<td>CSAF</td>
<td>Chief of Staff Air Force</td>
</tr>
<tr>
<td>CTF-77</td>
<td>Carrier Task Force - 77</td>
</tr>
<tr>
<td>CY</td>
<td>Calendar Year</td>
</tr>
</tbody>
</table>
DAO
Defense Attache Office

DART
Deployable Automatic Relay Terminal

DASC
Direct Air Support Center

D/D
Destroyed/Damaged

DIA
Defense Intelligence Agency

DISUM
Daily Intelligence Summary

DMPI
Desired Mean Point of Impact

DRV
Democratic Republic of Vietnam

DMZ
Demilitarized Zone

DOD
Department of Defense

EEI
Essential Elements of Information

E&I
Engineering and Installation

ELINT
Electronics Intelligence

E&ML
Environmental and Morale Leave

FAC
Forward Air Controller

FAG
Forward Air Guide

FANK
Forces Armees Nationale Khmer

FAR/FAN
Forces Armees Royaume/Forces Armees Neutre

FM
Frequency Modulation
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMFPAC</td>
<td>Fleet Marine Force Pacific Command</td>
</tr>
<tr>
<td>FPJMT</td>
<td>Four Party Joint Military Team</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
</tr>
<tr>
<td>GFE</td>
<td>Government Furnished Equipment</td>
</tr>
<tr>
<td>GOT</td>
<td>Gulf of Tonkin</td>
</tr>
<tr>
<td>GVN</td>
<td>Government of Vietnam</td>
</tr>
<tr>
<td>HOI</td>
<td>Headquarters Operating Instruction</td>
</tr>
<tr>
<td>HRCD</td>
<td>Human Resource Collection Directives</td>
</tr>
<tr>
<td>HUMINT</td>
<td>Human Intelligence</td>
</tr>
<tr>
<td>IBM</td>
<td>International Business Machines</td>
</tr>
<tr>
<td>ICCS</td>
<td>International Control Commission Supervision</td>
</tr>
<tr>
<td>ICR</td>
<td>Intelligence Collection Requirements</td>
</tr>
<tr>
<td>IG</td>
<td>Inspector General</td>
</tr>
<tr>
<td>INCR</td>
<td>Intelligence Collection Reconnaissance</td>
</tr>
<tr>
<td>IR</td>
<td>Infrared</td>
</tr>
<tr>
<td>ISSA</td>
<td>Interservice Support Agreement</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>JCRC</td>
<td>Joint Casualty Resolution Center</td>
</tr>
<tr>
<td>JGS</td>
<td>Joint General Staff</td>
</tr>
<tr>
<td>JTD</td>
<td>Joint Table of Distribution</td>
</tr>
<tr>
<td>KAF</td>
<td>Khmer Air Force</td>
</tr>
<tr>
<td>KBA</td>
<td>Killed By Air</td>
</tr>
<tr>
<td>KI</td>
<td>Khmer Insurgent</td>
</tr>
<tr>
<td>KR</td>
<td>Khmer Republic</td>
</tr>
<tr>
<td>KTAS</td>
<td>Knots True Air Speed</td>
</tr>
<tr>
<td>LGB</td>
<td>Laser Guided Bomb</td>
</tr>
<tr>
<td>LIF</td>
<td>Lao Infantry</td>
</tr>
<tr>
<td>LOC</td>
<td>Lines of Communication</td>
</tr>
<tr>
<td>LORAN</td>
<td>Long Range Airborne Navigation</td>
</tr>
<tr>
<td>MAC</td>
<td>Military Airlift Command</td>
</tr>
<tr>
<td>MACTHAI</td>
<td>Military Assistance Command, Thailand</td>
</tr>
<tr>
<td>MAP</td>
<td>Military Assistance Program</td>
</tr>
<tr>
<td>MASF</td>
<td>Military Assistance Service Funding</td>
</tr>
<tr>
<td>MIA</td>
<td>Missing In Action</td>
</tr>
<tr>
<td>MIG</td>
<td>Military Intelligence Group</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>MR</td>
<td>Military Region</td>
</tr>
<tr>
<td>MSQ</td>
<td>Mobile Search Special</td>
</tr>
<tr>
<td>MTBF</td>
<td>Mean Time Between Failures</td>
</tr>
<tr>
<td>NEMVAC</td>
<td>Noncombatant Emergency Evacuation</td>
</tr>
<tr>
<td>NKP</td>
<td>Nakhon Phnom</td>
</tr>
<tr>
<td>NM</td>
<td>Nautical Mile</td>
</tr>
<tr>
<td>NTR</td>
<td>Nontactical Radio</td>
</tr>
<tr>
<td>NVA</td>
<td>North Vietnamese Army</td>
</tr>
<tr>
<td>NVAF</td>
<td>North Vietnamese Air Force</td>
</tr>
<tr>
<td>OCG</td>
<td>Overseas Coordinating Group</td>
</tr>
<tr>
<td>O&amp;M, N</td>
<td>Operations and Maintenance, Navy Funds</td>
</tr>
<tr>
<td>OPCON</td>
<td>Operational Control</td>
</tr>
<tr>
<td>OPLAN</td>
<td>Operations Plan</td>
</tr>
<tr>
<td>OPORD</td>
<td>Operations Order</td>
</tr>
<tr>
<td>OREPO</td>
<td>Operations Report</td>
</tr>
<tr>
<td>OPSEC</td>
<td>Operations Security</td>
</tr>
<tr>
<td>OS</td>
<td>Operating System</td>
</tr>
<tr>
<td>PACAF</td>
<td>Pacific Air Forces</td>
</tr>
<tr>
<td>PACFLT</td>
<td>Pacific Fleet</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>PACOM</td>
<td>Pacific Command</td>
</tr>
<tr>
<td>PCA</td>
<td>Positive Control Area</td>
</tr>
<tr>
<td>PEC</td>
<td>Pacific Command Electronics Intelligence Center</td>
</tr>
<tr>
<td>POL</td>
<td>Petroleum, Oil and Lubricants</td>
</tr>
<tr>
<td>PPSMR</td>
<td>Phnom Penh Special Military Region</td>
</tr>
<tr>
<td>PR</td>
<td>Personnel Recovery</td>
</tr>
<tr>
<td>PRG</td>
<td>Provisional Revolutionary Government</td>
</tr>
<tr>
<td>PUC</td>
<td>Presidential Unit Citation</td>
</tr>
<tr>
<td>RHAW</td>
<td>Radar Homing and Warning</td>
</tr>
<tr>
<td>RLAF</td>
<td>Royal Laotian Air Force</td>
</tr>
<tr>
<td>RLG</td>
<td>Royal Laotian Government</td>
</tr>
<tr>
<td>RLGAF</td>
<td>Royal Laotian Government Armed Forces</td>
</tr>
<tr>
<td>RO</td>
<td>Requirements Office</td>
</tr>
<tr>
<td>ROE</td>
<td>Rules of Engagement</td>
</tr>
<tr>
<td>R&amp;R</td>
<td>Rest and Recuperation</td>
</tr>
<tr>
<td>RTAFB</td>
<td>Royal Thai Air Force Base</td>
</tr>
<tr>
<td>RVN</td>
<td>Republic of Vietnam</td>
</tr>
<tr>
<td>RVNAF</td>
<td>Republic Vietnam Armed Forces</td>
</tr>
<tr>
<td>SAC</td>
<td>Strategic Air Command</td>
</tr>
<tr>
<td>SAM</td>
<td>Surface to Air Missile</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>SAR</td>
<td>Search and Recovery</td>
</tr>
<tr>
<td>SCDS</td>
<td>Scan Converter Display System</td>
</tr>
<tr>
<td>SEA</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>SEADAB</td>
<td>Southeast Asia Data Base</td>
</tr>
<tr>
<td>SGU</td>
<td>Special Guerilla Unit</td>
</tr>
<tr>
<td>SI</td>
<td>Special Intelligence</td>
</tr>
<tr>
<td>SIGINT</td>
<td>Signals Intelligence</td>
</tr>
<tr>
<td>SIPI</td>
<td>Special Interest Photographic Intelligence</td>
</tr>
<tr>
<td>SMAS</td>
<td>Special Mekong Air Sector</td>
</tr>
<tr>
<td>SPECOL</td>
<td>Special Consumer Oriented Language</td>
</tr>
<tr>
<td>SRF</td>
<td>Special Reporting Force</td>
</tr>
<tr>
<td>SRP</td>
<td>Sensor Reporting Post</td>
</tr>
<tr>
<td>STRATCOM</td>
<td>Strategic Command</td>
</tr>
<tr>
<td>TAC</td>
<td>Tactical Air Command</td>
</tr>
<tr>
<td>TACAIR</td>
<td>Tactical Air</td>
</tr>
<tr>
<td>TANWC</td>
<td>Tactical Air Warfare Center</td>
</tr>
<tr>
<td>TDY</td>
<td>Temporary Duty</td>
</tr>
<tr>
<td>TEMIG</td>
<td>Tactical Electro Magnetic Generator</td>
</tr>
<tr>
<td>TFW</td>
<td>Tactical Fighter Wing</td>
</tr>
<tr>
<td>TIC</td>
<td>Troops In Contact</td>
</tr>
<tr>
<td>TOT</td>
<td>Time Over Target</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>UHF</td>
<td>Ultra High Frequency</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USAIRA</td>
<td>United States Air Attaché</td>
</tr>
<tr>
<td>USARPAC</td>
<td>United States Army Pacific Command</td>
</tr>
<tr>
<td>USARSUPTHAI</td>
<td>United States Army Support Thailand</td>
</tr>
<tr>
<td>USMACV</td>
<td>United States Military Assistance Command Vietnam</td>
</tr>
<tr>
<td>USSAG/7AF</td>
<td>United States Support Activities Group/Seventh Air Force</td>
</tr>
<tr>
<td>UTii</td>
<td>Universal Traverse Mercater</td>
</tr>
<tr>
<td>VC</td>
<td>Viet Cong</td>
</tr>
<tr>
<td>VIHAF</td>
<td>Vietnamese Air Force</td>
</tr>
<tr>
<td>VR</td>
<td>Visual Reconnaissance</td>
</tr>
<tr>
<td>WBA</td>
<td>Wounded By Air</td>
</tr>
<tr>
<td>WIA</td>
<td>Wounded In Action</td>
</tr>
<tr>
<td>7ACCS</td>
<td>Seventh Airborne Command Control Squadron</td>
</tr>
<tr>
<td>Agency</td>
<td>Quantity</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>CINCPAC (J045)</td>
<td>2 Cys</td>
</tr>
<tr>
<td>JCS</td>
<td>1 Cy</td>
</tr>
<tr>
<td>COMUSMACTHAI</td>
<td>1 Cy</td>
</tr>
<tr>
<td>CINCPACAF (CSH)</td>
<td>2 Cys</td>
</tr>
<tr>
<td>CINCUSARPAC (GPSG)</td>
<td>1 Cy</td>
</tr>
<tr>
<td>CINCPACFLT (10A)</td>
<td>1 Cy</td>
</tr>
</tbody>
</table>

(This page is Unclassified)